

GARY DEVELOPMENT COMPANY, INC. LANDFILL
479 North Cline Avenue
P.O. Box 6056
Gary, Indiana 46406
EPA I.D. No. IND 077 005 916
Solid Waste Construction Permit No. SW-133
Solid Waste Operating Permit No. 45-2

initiated by
Matthew T. Klein
Hazardous Waste Section
Office of Enforcement
Indiana Department of Environmental Management
October 14, 1996

Enforcement Sensitive
Attorney-Client Work Product
Not For Public View

January 1970

National Disposal Contractors of Barrington, Illinois, proposed a landfill at the current Gary Development Company, Inc. ("GDC") site. The proposal was denied because (1) insufficient impermeable soil cover; (2) subsurface material was sand; (3) the water table was two (2) feet below the surface of the site; and (4) the site was in the floodplain of the Grand Calumet River. The site was formerly a borrow pit for the construction of Interstate 90.

January 13, 1970

The proposed solid waste landfill site was evaluated by representatives of the National Disposal Contractors and representatives of the Indiana State Board of Health ("ISBH").

January 22, 1970

A letter to Mr. George Edema, Vice President, National Disposal Contractors, was issued from Mr. Ray Kocher, Chief, General Sanitation Section, Division of Sanitary Engineering, ISBH stating that the "site is not satisfactory for a sanitary landfill operation." Specifically, sufficient cover material, necessary and of a quality for proper operation of a sanitary landfill, was not available at the site; and the identification of fine sand from zero (0) to thirty (30) feet did not provide protection from leachate contamination.

October 19, 1970

The Common Council of the City of Gary on October 6, 1970 passed Ordinance No. 4489 entitled, "An Ordinance Allowing 'Special Use' in M-3 District of Chapter 8, Entitled 'Manufacturing Districts' of Title 6 Entitled 'Zoning Ordinance' of the Municipal Code of the City of Gary, Indiana." Section 2 of Ordinance No. 4489 states, "As special conditions of the aforesaid Special Use and as an additional restriction on said use, the following requirements shall hereafter and at all time be met by the owner, lessee or any other person, firm or corporation using such real estate:

1. That the petitioner submit to this commission site plans and their program for operations before the erection of the plant and commencement of operations.
2. That the hole be drained of water and that it will be continually pumped until the completion of the landfill or termination of the Special Use by the City of Gary.
3. That the Sanitary District approve the outflow of water to prevent pollution.
4. That there will be no open burning and any burning or smoke emission be in conformance with the Gary Air Pollution Ordinance.

5. That if this petition is approved, the petitioner will post a \$100,000 bond for the life of the dump. This bond will guarantee landfill, the fencing of the dump and any liability that may result from the operation of the dump.
6. That all garbage, trash and refuse dumped, will be compressed.
7. That the compressed garbage will be covered daily with sand or dirt to seal it.
8. That no additional sandmining or earth removal be carried out except site preparation for construction of the plant and for use as cover material over the compressed garbage.
9. That failure to comply with the above listed conditions is adequate grounds for the Director of the Department of Development and Planning with concurrence of the Corporation Counsel to revoke this Special Use."

Ordinance No. 4489 was signed by Mayor Richard Hatcher on October 19, 1970.

August 25, 1972

Messrs. Robert Babcock, Robert Heider, and Robert Cotton, ISBH, met with Mr. Jackie Shropshire, attorney representing the Rock Road Construction Company (5915 North Rogers Avenue, Chicago, Illinois), the owner of the site. Mr. Shropshire noted that his client was interested in seeking approval to use the sixty-one (61) acre borrow pit for use as a solid waste landfill. He stated that the borrow pit is approximately twelve (12) years old and has a depth of roughly twenty-five (25) feet. Mr. Shropshire provided a copy of Gary City Ordinance No. 4489, signed by Gary Mayor Richard Hatcher on October 19, 1970, evidently approving the use of the borrow pit, with stipulations, as a solid waste landfill. Mr. Shropshire was currently waiting for the ISBH to approve the pumping of the water within the borrow pit into the Grand Calumet River.

October 3, 1972

Mr. Joseph Tite, P.E., City Engineer for Michigan City, telephoned Mr. Babcock to notify that he was considering acting as the consulting engineer for the owner of the site. Mr. Tite noted that the borrow pit would have to be drained prior to construction of the solid waste landfill. He inquired as to what analyses would need to be performed to demonstrate that the borrow pit water would not violate Stream Pollution Control ("SPC") Regulation 7R when pumping such water into the Grand Calumet River. Mr. Babcock suggested BOD, total phosphate and ammonia nitrogen would be needed, and possibly various metals, in making such a determination.

October 1972

Mr. Joseph Tite, P.E., contacted the ISBH to notify it that he had been hired by the Road Rock Construction Company from Illinois to design a solid waste landfill at the GDC site. Mr. Tite requested permission from the Stream Pollution Control Board ("SPCB") to discharge water from the flooded borrow pit into the Grand Calumet River. After an analysis of the water within the borrow pit, the SPCB granted the now Gary Land Development Company, or GDC, permission to pump this water from the borrow pit into the Grand Calumet River on May 16, 1973.

May 7, 1973

Mr. Tite issued a letter to Mr. Roland P. Dove, Chief, General Sanitation Section, Division of Sanitary Engineering, ISBH, requesting permission to begin pumping water from the borrow pit into the Grand Calumet River. It was estimated that the process would take approximately thirty (30) to forty (40) days. Mr. Tite proposed that the point of discharge occur on the north bank of the Grand Calumet River approximately 0.4 miles east of Cline Avenue. The letter noted that once the water is removed from the borrow pit, GDC would begin construction of the external separate perimeter drainage system, internal bottom grading of the site, and separate leachate collection trenching.

May 16, 1973

A letter was issued to Mr. William Nanini, GDC, from Mr. Oral Hert, Technical Secretary, ISBH, stating the SPCB had approved Mr. Tite's proposal to pump water from the borrow pit into the Grand Calumet River on May 15, 1973. The approval was granted with the following conditions:

1. A complete proposal for the sanitary landfill operation be submitted to and approved by the ISBH prior to any operations in the dewatered pit;
2. That, if nuisance or pollution conditions are created, immediate corrective action will be taken by the operator;
3. That all necessary local permits, including zoning, be obtained prior to any operation; and
4. That this approval be renewed upon any change in ownership or operating contractor.

This approval was noted as Approval No. SW-129.

May 31, 1973

GDC submitted a solid waste landfill proposal as prepared by Mr. Tite. The proposal included: (1) an exterior perimeter drainage system; (2) clay walls to seal the walls of the borrow pit; (3) an interior leachate collection system to be connected to the East Chicago Sanitary District sewer system; (4) daily clay cover; (5) no disposal of liquid or sludge wastes; and (6) a system of groundwater monitoring wells was to be installed around the perimeter of the site.

June 21, 1973

The proposal for the construction of the GDC solid waste landfill was approved (Solid Waste Construction Permit No. SW-133) by the SPCB. [*Finding of Fact No. 3 in Cause No. N-146 notes this date to be June 19, 1973.*]

August 20, 1973

A letter was issued to Mr. Nanini from Mr. Victor Wenning, P.E., Assistant Chief, Division of Water, Indiana Department of Natural Resources ("IDNR"), advising Mr. Nanini that pursuant to Chapter 318, 1945 Flood Control Act, as amended, (IC 1971-13-2-22), any construction in a floodway must also be approved by the Natural Resources Commission before construction is commenced. The letter indicated that the project to pump water from the borrow pit into the Grand Calumet River would require such approval.

October 5, 1973

An inspection of the GDC Landfill was conducted at 11:30am by Messrs. R. Colton and David Finton. They observed water still leaching into the gravel pit.

January 4, 1974

An inspection of the GDC Landfill was conducted at 2:00pm by Mr. Claude Goodley. Mr. Goodley noted that the pit was not completely drained of the water that had been leaching into it.

January 23, 1974

A letter was issued to Mr. Tite from Mr. Brian Opel, Acting Chief, Solid Waste Management Section, regarding an update on the status of the GDC site.

February 1974

The GDC site had not been dewatered and no appreciable amount of construction of the solid waste landfill had occurred.

March 8, 1974

Mr. Tite informed ISBH that he was no longer involved in the development of the GDC Landfill, prompting a written request on March 8, 1974 to GDC for assurances that the GDC Landfill would be constructed in accordance with SW-133.

April 23, 1974

A letter to Mr. Opel from Mr. Charles Dickens, Zoning Administrator, Department of Development and Planning, City of Gary, noted that the Department of Development and Planning was evaluating whether GDC had met the conditions placed upon them. *[Most likely, these are the conditions enumerated within Ordinance No. 4489 from October 19, 1970.]*

August 28, 1974

Correspondence from Mr. Nicholas Cost, Acting Director, Gary Sanitary District, to the SPCB noted that the leachate collected from the GDC Landfill would be transported via GDC's four thousand (4,000) gallon tanker to their wastewater treatment plant. GDC shall pay the Gary Sanitary District \$12.00 per load. *[Did SW-133 only authorize the transport of leachate to the East Chicago Sanitary District, not to the Gary Sanitary District?]*

August 29, 1974

Messrs. Goodley and Finton conducted the final pre-permit inspection of the GDC Landfill.

September 11, 1974

A letter was issued to Mr. Larry Hagen from Mr. Hert granting final approval to GDC, thus allowing operations to begin. The GDC Landfill was inspected by Messrs. Goodley and Finton on August 29, 1974 and it was determined that the construction requirements of SW-133 were met and, therefore, the site should be issued its operating permit. Subsequent inspections revealed the two (2) separate collection systems, one for dewatering and one for leachate collection, were never constructed. Furthermore, the leachate was being pumped into the Grand Calumet River rather than being transported to the Gary Sanitary District wastewater treatment plant. Lastly, the inspections noted that the sides of the sand pit were not adequately lined with clay and the daily cover, when applied, is sand and not clay as required.

September 13, 1974

The GDC Landfill began its landfill disposal operation.

November 14, 1974

The SPCB received GDC's *Application for Sanitary Landfill Operating Permit* as completed by Mr. Hagen. Nine (9) pieces of information were requested. Mr. Hagen answered all the questions, noting, among other things:

- the GDC Landfill is sixty-one and nine-tenths (61.9) acres located in the Southwest $\frac{1}{4}$, Section 35, Township 37 [North], Range 9 West. It is also located six hundred and fifty (650) feet east of Cline Avenue and north of the [Grand Calumet] River.
- operations at the GDC Landfill began on September 13, 1974.
- the application noted that the GDC Landfill was currently accepting eight hundred (800) [cubic] yards of garbage and five hundred (500) yards of concrete and brick per day.
- the application listed Independent Waste Company (with the temporary permission of Mr. Finton) as disposing of twelve thousand (12,000) gallons of Dripolene sludge per week [*see the February 24, 1975 entry on Dripolene sludge.*]

December 17, 1974

Messrs. Goodley and George Dayhuff inspected the GDC Landfill at 11:00am and did not find any problems at that time.

January 30, 1975

The GDC Landfill was inspected by Mr. Goodley at 2:00pm. Liquid wastes were observed being disposed. [*The report from which this information is derived notes that GDC accepted hazardous wastes, liquid wastes, and sludge wastes from January 30, 1975 until, at least, January 18, 1977, the date of Mr. Bruce Palin's report.*] Mr. Hagen, the site manager at the time, was reminded that he was not allowed to accept these wastes without approval of the SPCB.

February 11, 1975

The GDC Landfill was inspected.

February 13, 1975

A letter from State Representative Donnabelle Mahoney to Mr. Hert inquired as to the nature of the GDC Landfill.

February 20, 1975

The GDC Landfill was issued Solid Waste Operating Permit No. 45-2. [*Verify this date.*]

February 24, 1975

A response by Mr. Samuel Moore, Acting Technical Secretary, ISBH, to State Representative Mahoney noted, among other things, that operations at the GDC Landfill began in September, 1974 and that the SPC-18 operating permit would be issued within the next few days.

A letter was issued to Mr. Tom Crumpton, Independent Waste Systems, Inc., P.O. Box 8206, Merrillville, Indiana, 46410, from Mr. Dove regarding the approval for disposal of Union Carbide's Dripolene at the GDC Landfill. The letter approved four (4) to five (5) truckloads per week for a period of six (6) months. Such disposal at the GDC Landfill was conditioned on the Dripolene being mixed with the regular municipal solid waste and being covered daily.

April 1, 1975

The GDC Landfill was inspected by Mr. Goodley at 3:30pm. Mr. Goodley noted that GDC was disposing of solid waste into water and, additionally, a noticeable amount of paper was blowing around the GDC Landfill.

June 4, 1975

The GDC Landfill was inspected by Mr. Goodley at 1:30pm. Mr. Goodley noted that paper was blowing around at the GDC Landfill.

June 18, 1975

A letter was issued to Mr. Art Davis, Conservation Chemical Company, Box 6066, Gary, Indiana, 46406, from Mr. Dove regarding the approval for disposal of neutralized sludges from Conservation Chemical Company at the GDC Landfill. The approval letter was an interim approval letter until a more environmentally acceptable disposal method was identified. Other conditions included:

1. the sludge should be mixed with sand for dewatering and disposed in a trench located at least one hundred (100) feet from the general refuse. No other materials or refuse may be mixed with the sludge;
2. a minimum of one (1) foot of clay cover soil be applied immediately. Further, a final cover of two (2) feet of clay be applied upon completion of the area;
3. the disposal area for the sludge be noted on a plot plan to prevent disposal of other materials in this area;

4. prior arrangement shall be made with Mr. Hagen to assure that the sludge is not deposited during inclement weather; and
5. should the disposal of the sludge create an environmental problem, corrective measures will be initiated.

October 9, 1975

The GDC Landfill was inspected by Mr. Opel at 11:15am. Mr. Opel noted that the daily cover being applied to the GDC Landfill was inadequate, noting on the inspection report that good compaction of refuse exists, but daily cover is insufficient. Specifically, an area of nearly 2 acres of insufficiently compacted refuse existed. The report also noted that the East Chicago Incinerator was "hauling in" as the incinerator was out of service. Mr. Opel also observed that a pit, containing oily, tar-type wastes, was in use near the refuse on the working face, and a pit on the western portion of the "built up" area contained drums, solid wastes, and liquid wastes from Arco in East Chicago.

October 10, 1975

A letter was issued to Mr. Hagen from Mr. Opel noting that the GDC Landfill was one of the few landfills in Indiana with special approval to accept hazardous waste for disposal. More importantly, the letter stated that the ISBH would soon require the monitoring of the groundwater surrounding the GDC Landfill.

October 27, 1975

Mr. Mike Finton inspected the liquid waste disposal area at the GDC Landfill. Mr. Finton explained to Mr. Hagen that GDC would need to secure the appropriate permits for the acceptance of any liquid waste for disposal at the GDC Landfill. Furthermore, the indefinite ponding of liquid wastes was not in keeping with the ISBH requirements for liquid waste disposal. Mr. Finton stated that the liquid wastes should be mixed with incoming refuse. Mr. Finton also noted that Mr. Hagen should prepare to install a groundwater monitoring system as this was in accordance with the original proposal for the GDC Landfill.

Mr. Finton noted that the site was in poor condition as wastes were being placed on two (2) working faces. Furthermore, daily cover was not being maintained and blowing paper was not being controlled.

November 17, 1975

Representatives of the ISBH met with Mr. Hagen of GDC. Mr. Hagen was ordered to stop accepting unauthorized hazardous waste streams. Also, Mr. Hagen was told to install groundwater monitoring wells and to improve the daily cover provided to the wastes disposed.

December 2, 1975

The GDC Landfill was inspected by Mr. Dayhuff at 12:00pm. Mr. Dayhuff observed the GDC Landfill for approximately twenty (20) minutes and did not observe any liquid or sludge wastes entering the GDC Landfill.

January 12, 1976

After subsequent inspections revealed no improvement in the operation of the GDC Landfill, GDC was ordered to cease all dumping of liquid sludge and hazardous waste immediately.

January 22, 1976

An inspection of the GDC Landfill was conducted by Messrs. Dayhuff and Finton at 1:30pm. They noted that General Drainage had transported an industrial waste from American Maize to the GDC Landfill. Also, they observed that Industrial Disposal had transported a lime slurry waste to the GDC Landfill. Both wastestreams were unacceptable for disposal at the GDC Landfill as they had not been pre-approved.

January 26, 1976

An inspection of the GDC Landfill was conducted. An unapproved lime slurry waste was observed as being on-site during the inspection. *[Find this inspection report. Is this the January 22, 1976 report?]*

February 11, 1976

An inspection of the GDC Landfill was conducted at 3:30pm by Mr. Dayhuff. Mr. Dayhuff observed surface water draining over and through the solid wastes. Also, paper was noted as blowing around the GDC Landfill.

February 20, 1976

A Violation Letter was issued to GDC delineating problems associated with leachate, daily cover, blowing paper, and the continuing need for the installation of a groundwater monitoring system. Specifically, GDC was accepting liquid, sludge, and hazardous waste in violation of SPC-18, Chapter V.

February 26, 1976

Mr. Dayhuff inspected the GDC Landfill at 4:00pm and found it to be "in relatively poor shape." Mr. Dayhuff noted three (3) problems. First, Mr. Hagen was using the northeast portion

of the site for disposal of bulky, metal, and industrial wastes. Furthermore, it was observed that this area had not been equipped with an underfill drain and was leaching badly.

The second problem surrounded the leachate disposal. Mr. Dayhuff noted that the leachate generated from both the northeast portion and main portion of the GDC Landfill was being pumped directly into the Grand Calumet River. Mr. Dayhuff observed that GDC's leachate monitoring program was to begin on May 1, 1976 and that an alternative method for treatment and disposal of the leachate would have to be considered.

The last problem identified by Mr. Dayhuff was "a body of evidence" that was developing indicating hazardous industrial liquid and sludge wastes being disposed at the GDC Landfill without approval. Mr. Dayhuff noted that paint sludge from American Chemical Services in Griffith, Indiana had been accepted for disposal at the GDC Landfill.

March 9, 10, and 12, 1976

In an effort to determine which entities were using the GDC Landfill and their associated waste streams, Mr. Dayhuff observed trucks entering the GDC Landfill. Mr. Dayhuff reported the following:

- | | |
|-------------------------|-----------------------------------|
| 1. City of Hammond | garbage trucks |
| 2. City of Hammond | street department trucks |
| 3. Industrial Disposal | trash, debris, garbage |
| 4. Industrial Disposal | sludge |
| 5. General Drainage | liquid |
| 6. Calumet Wastes, Inc. | trash, garbage, industrial wastes |
| 7. Calumet Wastes, Inc. | sludge |
| 8. Independent Wastes | garbage |

Mr. Dayhuff noted that General Drainage was, by far, the most frequent disposer of liquids and sludges at the GDC Landfill. Mr. Dayhuff estimated that General Drainage was disposing of between 15,000 and 20,000 gallons of liquids per day.

April 5, 1976

An inspection of the GDC Landfill was conducted at 2:30pm by Mr. Dayhuff. Mr. Dayhuff noted that "bulky wastes" were being disposed at an area adjacent to the railroad tracks and, furthermore, daily cover was being applied but was not adequate.

April 12, 1976

A letter was issued to Mr. William Bogner, General Drainage, 1520 Blaine Street, Gary, Indiana, 46406, from Mr. Dove regarding the approval for disposal of paint sludges from

American Chemical Service, Griffith, Indiana at the GDC Landfill. The approval noted that the GDC Landfill could only accept twenty five (25) cubic yards per day.

May 11, 1976

An inspection of the GDC Landfill was conducted at 10:45am by Mr. Dayhuff. He observed that the dewatering process at the GDC Landfill had included the leachate that was generated and, subsequently, the mixture was being pumped into the Grand Calumet River.

May 12, 1976

Mr. Dayhuff obtained eleven (11) water samples from the GDC Landfill. Mr. Dayhuff observed a discharge from the GDC Landfill into the Grand Calumet River. *[Place results here as contained within a table.]*

May 26, 1976

An inspection of the GDC Landfill was conducted by Mr. Dayhuff at 2:00pm. He noted that a disposal area on the east portion of the GDC Landfill was not covered with sufficient daily cover.

July 14, 1976

Messrs. Dayhuff and Bruce Palin inspected the GDC Landfill at 11:45am. He observed that GDC was using sand for daily cover. Additionally, he observed two (2) trucks from Industrial Disposal enter the site and dispose of approximately two thousand (2,000) gallons of an oily liquid. Mr. Dayhuff subsequently contacted Mr. Dan McCartle of Industrial Disposal to determine the origin of the oily liquid. Mr. McCartle stated that the liquid came from Youngstown Sheet & Tube Company, but was unable to identify the specific liquid disposed at the GDC Landfill. Mr. Dayhuff proceeded to contact Mr. Carl Broman of Youngstown Sheet & Tube Company. Mr. Broman stated that the liquid waste was a mixture of iron scale, lubricating oil, and rolling solution. Mr. Broman also stated that they were not "reporting" this waste, but would do so if asked.

In this memo to Mr. Jim Hunt, dated August 5, 1976, Mr. Dayhuff noted that the GDC Landfill would be cited for accepting the oily liquid without approval. Furthermore, Mr. Dayhuff explained that he would be meeting with Mr. Broman on July 29, 1976 to discuss "filing procedures" for Youngstown Sheet & Tube Company.

August 9, 1976

A letter was issued to Mr. Gary Schepper of the Conservation Chemical Company (P.O. Box 6066, Gary, Indiana, 46406) from Mr. Roland P. Dove, Director, Division of Sanitary

Engineering, ISBH, regarding a request to dispose of liquid and sludge wastes at the GDC Landfill. The letter stated that the request was denied because (1) the liquid wastes were acids with a pH ranging from 0.5 to 1.8, and (2) the sludges were hydroxide plating wastes requiring a separate area for disposal. The letter noted it was understood by the ISBH that the aforementioned wastes were currently being disposed at the CID Landfill in Illinois.

August 10, 1976

Messrs. Palin and Dayhuff inspected the GDC Landfill at 2:15pm and spent approximately two (2) hours observing trucks entering the GDC site. They identified the following shipments by Industrial Disposal: six (6) loads, approximately forty (40) cubic yards each, of Georgia Pacific sludge (noted as having the consistency of moist blue clay); two (2) loads of liquid oil sludge; and one (1) load of lime sludge from Union Carbide. Mr. Dayhuff estimated that approximately one hundred thousand (100,000) cubic yards of Georgia Pacific sludge had been disposed at the GDC Landfill within the past seven (7) days. It was observed that the Georgia Pacific sludge was being used for constructing wind walls and for intermediate cover.

The inspection also revealed a large hole approximately fifty (50) feet by eighty (80) feet within the general refuse disposal area. The identified hole retained a black oil waste which Mr. Hagen claimed was transported by General Drainage from the sewers at the Shell Oil Refinery. The hole was also filled with ten (10) fifty-five (55) gallon drums.

Mr. Hagen was reminded that he is not to accept any liquid, sludge, or other hazardous wastes without prior written approval.

Messrs. Palin and Dayhuff traveled to the origin of the Georgia Pacific sludge drying beds at the intersection of Clark Road and Industrial Highway. Industrial Disposal's equipment was observed digging out the Georgia Pacific sludge lagoons.

August 13, 1976

Mr. David Lamm received a telephone call from Mr. Dick Cleaton regarding the GDC Landfill. First, Mr. Cleaton advised that a waste hauler by the name of Mr. Frank had a vast amount of information concerning the illegal disposal operations by the GDC Landfill. Mr. Cleaton was scheduled to discuss the information in greater detail with Mr. Frank. Second, Mr. Cleaton noted that Mr. Ernie DeHart now has all of Mr. Steve Martell's solvent business and Mr. DeHart is now using the 15th & Cline Street Dump. Additionally, Mr. DeHart periodically transports solvents to the GDC Landfill. Lastly, Mr. Cleaton noted that the Georgia Pacific paper sludge was still being transported to and disposed at the GDC Landfill.

August 26, 1976

Mr. Palin obtained six (6) water samples from the GDC Landfill revealing significant amounts of heavy metals and oils being pumped into the Grand Calumet River. Specifically, the results were:

Sample Identification	pH	Hex. Chrome PPM	Total Chrome PPM	Lead PPM	Cadmium PPM	Arsenic PPM
Well-West Bank of Pit	7.8	0.08	0.08	0.09	1.12	0.013
Well-North Bank of Pit	6.4	0.03	0.08	0.008	1.12	0.0
Well-East Bank of Pit	7.15	0.02	0.02	0.01	1.12	0.0
Well-South Bank of Pit	6.5	0.03	0.03	0.0	0.1	0.0
Perimeter out pest	7.65	0.02	0.07	0.12	0.1	0.36
Well at bldg.	7.1	0.06	0.06	1.0	0.1	0.0

September 20, 1976

A letter was issued to Mr. Hagen from Mr. Lamm, Acting Chief, Solid Waste Management Section, Division of Sanitary Engineering, ISBH, notifying him that the permit for the GDC Landfill will expire on February 1, 1977.

October 5, 1976

Mr. Palin inspected the GDC Landfill at 1:00pm and noted a steaming pile of aluminum dust in a separate area of the site. Upon questioning, Mr. Hagen revealed that the aluminum dust originated from U.S. Reduction and that an approval letter had not been secured. Mr. Palin also observed an oily substance accumulated within the general disposal area. Mr. Hagen was questioned as to why the oily substance was not situated within a separate disposal area. He responded that the oily substance was oil from catch basins that were cleaned by General Drainage and that staff members [*staff of the GDC Landfill or staff from General Drainage?*] instructed him to mix the oily substance with the general refuse.

Mr. Palin, lastly, informed Mr. Hagen of the results from the water sampling performed on August 26, 1976. The results obtained from the outfall adjacent to the Grand Calumet River indicated that the site was polluting the River.

October 6, 1976

Mr. Lamm received a telephone call from Ms. Carol Pearce, Office of the Attorney General, State of Illinois ((312) 793-2491), regarding her observation of water discharging from the GDC Landfill into the Grand Calumet River. She noted that she had received complaints from individuals on the Illinois portion of the River. Further, she questioned whether GDC had a NPDES permit to discharge into the Grand Calumet River.

October 8, 1976

Mr. Lamm spoke with Mr. Dove regarding the questions posed by Ms. Pearce on October 6, 1976. The question of the legality of GDC discharging into the Grand Calumet River was of prime concern.

October 20, 1976

A letter was issued to Ms. Pearce (188 West Randolph Street, Suite 2315, Chicago, Illinois, 60609) from Mr. Hert enclosing analyses of the water samples taken from the GDC site on May 13 and August 27, 1976. Mr. Hert noted that, at that time, the GDC site did not possess a NPDES permit.

October 27, 1976

Messrs. Palin and Dayhuff inspected the GDC Landfill and informed Mr. Hagen that the discharging of water from the site into the Grand Calumet River was a violation of Indiana law. Mr. Hagen was reminded that the construction plans for the GDC Landfill called for the leachate to be collected and transported to the East Chicago Sanitary District. Furthermore, Messrs. Palin and Dayhuff noted other deficiencies of the construction plans, including (1) the sides of the GDC Landfill were to be sealed with clay; (2) a perimeter dewatering system was to be installed outside the clay barrier; and (3) an on-site leachate collection system was to be installed.

Messrs. Palin and Dayhuff also observed a pit that Mr. Hagen had excavated. Mr. Hagen was placing approved and unapproved sludges into this pit. The sludges that were approved for disposal were required to be mixed with the general refuse and disposed within a separate area, not into the newly excavated pit.

October 29, 1976

Mr. Lamm received a telephone call from Ms. Pearce regarding current enforcement actions by ISBH against the GDC Landfill.

November 5, 1976

A Violation Letter was issued to Mr. Hagen from Mr. Lamm for violation of Chapter 4, Section 1(a) of the Environmental Management Act. This section stated:

"No person shall discharge, emit, cause or allow any contaminant or waste, either alone or in combination with contaminants from other sources, into the environment in any form which would cause pollution."

This violation was determined based upon the results of the analysis of water samples obtained on August 26, 1976. The letter requested that Mr. Hagen notify ISBH within fifteen (15) days to discuss the corrective action to be initiated.

November 17, 1976

A letter was issued to Mr. Hagen from Mr. Lamm stating that the industrial wastes approved for disposal at the GDC Landfill were to be mixed with the general refuse and not placed within a separate disposal area [see October 27, 1976 entry]. The letter required Mr. Hagen to cover the separate area trench with two (2) feet of compacted clay within thirty (30) days.

December 1, 1976

Mr. Dayhuff issued a memorandum to the GDC Landfill file. The memorandum requested that the disposal of liquid oil waste at the GDC Landfill be ceased. He noted that he and Mr. Palin had been aware since July 14, 1976, of the disposal of liquid oil waste by Industrial Disposal at the GDC Landfill. Mr. Dayhuff noted that Industrial Disposal trucks have been observed at the site during the majority of the inspections. Oil from the GDC Landfill was moving into the dewatering system and is subsequently being pumped into the Grand Calumet River.

December 2, 1976

Representatives from the Indiana State Board of Health met with Mr. Hagen to discuss the discharge of GDC Landfill leachate into the Grand Calumet River. Mr. Hagen stated that he was issuing a complaint to the Governor and would not be taking any action until he discussed the matter with his lawyer.

December 14, 1976

A letter from Mr. Oral Hert was issued to Mr. Hagen of GDC citing its continued lack of compliance and, further, stating that his operating permit would not be renewed if the discharging was not terminated. Mr. Hagen did not respond to the letter within the timeframes specified.

December 28, 1976

Messrs. Palin, Dove, Lamm, Dayhuff, Johnie Baker, and Larry Brnicky toured several land disposal sites in Lake County, including Industrial Cinders, Bongi Dump, Industrial Disposal, Midco, Red Top Trucking, Martell Dump, Gary Dump, Lake Sandy Jo, Mose Richards, Black Oak Landfill, East Chicago Dump, Amoco Dump, and the GDC Landfill.

Later in the evening, they interviewed Mr. Bill Petrick, a representative of Liquid Waste Haulers. He stated that the GDC Landfill was "the biggest offender as far as accepting industrial wastes."

January 18, 1977

A Notice of Hearing and Violation, Cause No. B-406 was filed by the SPCB.

January 20, 1977

An inspection of the GDC Landfill was conducted by Mr. Palin at 1:40pm and 3:00pm. Mr. Palin was unable to conduct an inspection, apparently, because Mr. Hagen was not present at the site. Upon leaving the GDC Landfill, Mr. Palin observed a "liquid wastes" tanker truck from Illinois.

February 16, 1977

A memorandum was issued from Mr. Lamm to Mr. Robert G. Grant, Legal Section, ISBH, regarding the fact that the GDC Landfill had never received a Department of Natural Resources ("DNR") permit to construct within a floodplain.

March 2, 1977

A pre-hearing conference was held between representatives from ISBH and Mr. Hagen to prepare an Agreed Order for the resolution of, among other items, leachate discharges and improper acceptance of industrial waste.

March 4, 1977

A letter was issued to Mr. Hagen from Mr. Dove regarding the disposal of oil sludges from Youngstown Sheet & Tube. The letter noted that, until a solution for the disposal of the oil sludges could be found, GDC would be allowed to accept such oil sludges from only Youngstown Sheet & Tube for an interim period. This approval was granted upon the condition that the oil sludges be mixed with the general refuse and the entire working area compacted and covered in accordance with SPC-18. [See September 6, 1977 entry.]

March 9, 1977

A letter was issued to Mr. Hagen from Mr. Dove regarding the disposal of terminal treatment plant sludge from U.S. Steel. The letter granted interim approval for disposal of the terminal treatment plant sludge at the GDC Landfill until ISBH could complete an analysis of the chemical content of the waste. The letter noted that the waste should be mixed with the general refuse and covered daily.

March 11, 1977

A letter was issued to Messrs. Baker and Hunt from Mr. William C. Child, Northern Region Manager, Land Field Operations Section, Division of Land/Noise Pollution Control, Illinois Environmental Protection Agency, regarding the alleged disposal of various wastes at the GDC Landfill that had originated in Illinois.

The list attached to the letter noted various facilities that had generated and transported wastes to the GDC Landfill. The generators included:

1. Dreeblan Paint Company (paint washings)
2. Baron-Blakeslee Company (still bottoms)
3. Howell Company (nickel cleaner)
4. Hills McCanna Company (soluble oils)
5. Benjamin Moore & Company (wash thinners)
6. National Precision Circuits (CuNH_4 Persulfate)
7. Ansul Corporation (phenolic waste)
8. National Can Company (oil and water wastes)
9. Western Electric-Hawthorne Works (wire mill wastes)
10. Staley Chemical Company (industrial sludge)
11. H.P. Smith Paper Company (drum sludge)
12. Spot Nails (caustic sludge)
13. Union Special Corporation (soluble oils)
14. Allis-Chalmers (chrome sludge)
15. Delco Electronics (methanol and water)
16. Danly Machine Corporation (oil and waste water)

[Ansul Corporation is located in Marinette, Wisconsin and the disposal site was listed as "unknown." National Can Company is located in LaPorte, Indiana as the disposal site was listed as "various locations." The H.P. Smith Paper Company disposal site was listed as Midwest Solvent Recycling Corporation (MIDCO). Allis-Chalmers is located in LaPorte, Indiana. Delco Electronics is located in Kokomo, Indiana and the disposal site was listed as "incinerator in Northern Indiana."]

The transporters of waste to the GDC Landfill included:

1. Liquid Waste (Franklin Park, Illinois)
2. Conservation Chemical
3. Scrap Haulers Corporation (Riverdale, Illinois)
4. D&J Refuse (South Holland, Illinois)
5. Liquid Engineer Company
6. General Drainage, Inc. (Gary, Indiana)
7. Indiana Sanitation

March 14, 1977

A letter was issued to Mr. Hagen from Mr. Dove regarding the GDC Landfill's temporary approval to accept and dispose of lime waste from C. F. Petroleum. The temporary approval was granted on the condition that the lime waste be mixed with the general refuse. The letter noted that C. F. Petroleum generated the lime waste at a rate of approximately eighty thousand (80,000) gallons per month. [*Determine the nature of the lime waste and its specific point of generation.*]

A letter was issued to Mr. R. D. Steels, U.S.S. Lead Refinery, Inc., 5300 Kennedy Avenue, East Chicago, Indiana, 46312, from Mr. Dove regarding a phone conversation with Mr. Palin on March 8, 1977. The letter granted U.S.S. Lead Refinery, Inc. approval to dispose of its calcium sulfate waste at the GDC Landfill. The letter noted that the calcium sulfate waste was generated at a rate of approximately one and one-half (1.5) tons per day. The approval letter was conditioned on the moisture content of the calcium sulfate waste being enough to prevent dust problems and that the calcium sulfate waste be mixed with the general refuse. [*Reference EPA Compliance Order No. RCRA-V-W-86-R-45.*]

March 21, 1977

A letter was issued to Mr. Hert from Ms. Pearce regarding an update on pending enforcement actions against the GDC Landfill.

March 29, 1977

An inspection of the GDC Landfill was conducted at 9:10am by Mr. Palin. He noted that GDC was hauling sand from the bottom of the GDC Landfill.

March 31, 1977

Mr. Lamm spoke with Mr. Grant regarding the pending Agreed Order with GDC. Mr. Grant noted that it had been mailed to GDC for signature. Further, if it was not signed and returned by May 1, 1977, then Mr. Grant would initiate hearing proceedings.

April 12, 1977

Mr. Palin spoke with Mr. Tite regarding the GDC Landfill. Mr. Tite stated that Mr. Hagen had requested that Mr. Tite evaluate options for correcting the illegal discharge and leaching of pollutants onto the site from the adjacent property [*Vulcan Materials*]. Mr. Tite noted that he had several ideas, but each would be expensive to implement.

April 13, 1977

Mr. Palin telephoned Mr. Joe Kreiger in the Facilities Inspection Section to discuss the progress he had made with moving Vulcan Materials pit into compliance and ceasing the leaching from their pit into the GDC Landfill. Mr. Kreiger stated that Mr. Cleaton had been working with Vulcan Materials and had requested that they submit plans for proper construction of the pit.

April 25, 1977

A letter was issued to Mr. W. P. Thomas, Vice President of Operations, Energy Cooperative, Inc., 3500 Indianapolis Boulevard, East Chicago, Indiana, 46312 ("Energy Co-op"), from Mr. Dove regarding the approval to dispose of Energy Co-op's activated biological sludge at the GDC Landfill. The approval letter noted that disposal of the activated biological sludge was normally conducted through incineration [*most likely at the East Chicago Incinerator*], and that disposal at the GDC Landfill should be conducted only during times when the incinerator is inoperable. Furthermore, the approval letter noted that the activated biological sludge waste should be dewatered and in solid form before it is hauled to the GDC Landfill for disposal. Lastly, the activated biological sludge waste should be mixed with the general refuse and covered at the end of the working day.

April 27, 1977

Mr. Lamm telephoned Mr. William Baker, Sr., regarding the status of the Agreed Order issued to GDC. Mr. Baker noted that Mr. Hagen had objections to the Agreed Order and was instructed by Mr. Lamm to state those objections in writing to the ISBH.

May 17, 1977

A letter was issued to Mr. P. Zaccari, Industrial Rubbish Removal, 25W175 West Lake Street, Roselle, Illinois, 60172, from Mr. Dove regarding the approval to dispose of asbestos paper from the Borg-Warner plant in Bellwood, Illinois at the GDC Landfill. The approval letter noted that only one hundred and five (105) cubic yards per week of the asbestos paper waste would be allowed to be disposed at the GDC Landfill. The letter noted that the asbestos was bound in the paper with latex.

May 26, 1977

Mr. Palin conducted an inspection of the GDC Landfill at 12:55pm. Mr. Palin noted two (2) violations, including GDC's failure to properly compact the solid waste, and GDC's failure to provide adequate daily cover. GDC was using sand as daily cover.

June 1, 1977

A letter was issued to Mr. Walter Skibs, Energy Co-op, from Mr. Dove regarding a May 23, 1977 phone conversation with Mr. Palin. The letter granted approval for Energy Co-op to dispose of its lime sludge waste, generated as a result of a hot lime water softening process, at the GDC Landfill. The approval letter noted that Energy Co-op generated approximately eighty thousand (80,000) gallons of lime sludge waste per month. The approval letter specified that no more than four thousand (4,000) gallons per day of the lime sludge waste could be disposed at the GDC Landfill. Lastly, the approval letter required GDC to mix the lime sludge waste with the general refuse.

June 3, 1977

A letter was issued to Mr. Skibs, Energy Co-op, from Mr. Dove regarding a telephone conversation with Mr. Palin on May 23, 1977. The letter granted approval for Energy Co-op to dispose of its API separator bottoms waste at the GDC Landfill. The letter noted that Energy Co-op generates approximately two hundred (200) cubic yards per year of the API separator bottoms waste. The approval letter noted that the API separator bottoms waste should be mixed with the general refuse prior to disposal.

July 22, 1977

A letter was issued to Mr. W. A. McFarland, Manager, Quality Control, Vulcan Materials Company, 459 North Cline Avenue, Gary, Indiana, 46406 ("Vulcan"), from Mr. Dove regarding the receipt of a letter from Vulcan dated June 30, 1977. The letter to Mr. McFarland noted that Vulcan had been previously granted temporary approval for the disposal of filter cake waste and kiln scrubber waste at the GDC Landfill. *[Determine the nature of both waste streams, and find a copy of the June 30, 1977 letter.]* The letter noted the receipt and subsequent review of the two (2) above-noted wastes, and stated that both the filter cake waste and kiln scrubber waste could continue to be disposed at the GDC Landfill. Lastly, the letter noted approximately fifteen hundred (1,500) pounds of the filter cake and three thousand (3,000) pounds of the kiln scrubber waste were generated per week for disposal at the GDC Landfill.

August 1, 1977

Mr. Palin telephoned Mr. Grant to determine the status of the GDC hearing before the SPCB. Mr. Grant advised that Vulcan Materials and GDC were to be scheduled for hearing together. Mr. Grant believed the next SPCB meeting would occur after August 16, 1977.

August 8, 1977

Mr. Palin conducted an inspection of the GDC Landfill at 1:45pm. Mr. Palin observed that the Vulcan pit west of the GDC Landfill was full of water and still leaching into the GDC Landfill pit.

September 6, 1977

A letter was issued to Mr. Carl Broman, Youngstown Sheet & Tube Company, 3001 Dickey Road, East Chicago, Indiana, 46312, from Mr. Hert regarding the approval to dispose of oily waste from the 6-Stand Oil Recovery Unit at the GDC Landfill. This oily waste previously temporarily approved for disposal at the GDC Landfill on March 4, 1977. The letter noted that the ISBH determined that the GDC Landfill was capable of absorbing the oily waste from the 6-Stand Oil Recovery Unit. The letter further noted that approximately twelve hundred (1,200) gallons per day of the oily waste was generated by Youngstown Sheet & Tube Company for disposal at the GDC Landfill.

November 18, 1977

A letter was issued to Mr. Wayne Slager, Calumet Waste Systems, P.O. Box 4147, Hammond, Indiana, 46324, from Mr. Hert regarding the one-time disposal of one hundred and twenty (120) cubic yards of herbicide waste from E. I. DuPont DeNemours Company, Inc. at the GDC Landfill. Mr. Slager had previously requested permission to dispose of the herbicide waste at the GDC Landfill through a letter dated October 31, 1977. *[Obtain the October 31, 1977 letter and determine the exact nature of the particular herbicide.]*

October 20, 1977

Messrs. Palin and King performed an inspection at the GDC Landfill at 2:00pm. Messrs. Palin and King observed two (2) violations, including open burning and failure to provide adequate layering and compaction of the solid waste. The inspection report noted that a fire was burning, but did not specify the origin nor location.

December 6, 1977

A memorandum entitled, "Geologic Description and Evaluation" from Mr. Jim King of the Indiana State Board of Health was sent to the GDC public file. What follows is quoted directly from the "Evaluation and Recommendation" section of this memorandum.

This site is definitely geologically unacceptable for waste disposal and is a hazard to groundwater and surface water resources in its vicinity. Groundwater is currently collected in sumps and is pumped into the [Grand Calumet] river at a rate of about 1,000 gpm during the wettest part of the year. After the site is abandoned and pumping ceases, water levels will recover to their pre-dewatering levels and will saturate the filled area. The existence of seepage from the river and local industries into the pit provides obvious evidence of the high permeability of the sand unit into which the refuse is being placed. In June of 1973, the site manager was directed to monitor the quality of water pumped from the pit area into the river and, to date, has not complied. Five monitoring wells have been installed around the site's perimeter, but sample analyses have been submitted sporadically. Water analyses received thus far show little water quality degradation, but some primary leachate indicators are absent from these reports. Among other problems documented at this site are the use of sand as cover material and the acceptance of hazardous wastes. Under no circumstances should hazardous wastes be accepted at this site at any time. In addition, a permit from the Department of Natural Resources for floodplain alteration has never been acquired.

I strongly advise that this site institute closure procedures immediately because of the health threat it poses. The problems resulting from the poor geologic environment are further compounded by a lack of willingness of the part of the landfill personnel to adhere to good operational procedures.

December 28, 1977

An inspection of the GDC Landfill was conducted at 2:15pm by Messrs. Palin and Tim Kelley. They observed that GDC was landfilling via the "cliff" method. Additionally, a trench had been made in an old disposal area that was being utilized for the disposal of liquid wastes. A total demerit score of nine (9) was calculated.

March 15, 1978

Mr. Palin conducted an inspection of the GDC Landfill at 2:15pm. Mr. Palin calculated a demerit score of seventeen (17) for the GDC Landfill and noted this as unacceptable. Mr. Palin observed that the northeast corner of the current fill area was uncovered and that several underground fires were ongoing at various locations on-site. Additionally, three (3) pits had been excavated at completed areas of the GDC Landfill and filled with oily waste. Furthermore, Mr. Palin noted that the area between the fill area and the east wall of the GDC Landfill had standing or ponded water. Lastly, Mr. Palin determined that staff of the GDC Landfill had been working the refuse by utilizing the "cliff" method.

March 17, 1978

A meeting to discuss the impending litigation over the GDC Landfill was held by staff of the ISBH. Messrs. Grant, Lamm, Joseph Stallsmith, Joseph Snyder, and Joseph Kreiger, among others, attended the meeting.

April 7, 1978

Mr. Palin inspected the GDC Landfill at 10:15am. Mr. Palin provided the GDC Landfill with a demerit score of nine (9), an unacceptable rating, because of a lack of daily cover in a particular area. Mr. Palin also observed the unpermitted discharge of pollutants into the Grand Calumet River and obtained a sample from the discharge pipe. *[It is unclear to which pipe Mr. Palin was referring]*. The analysis (Lab Analysis No. 0459) of the sample obtained from the discharge pipe revealed:

1.	arsenic	0.035 mg/L
2.	chlorides	1600.0 mg/L
3.	chromium	0.10 mg/L
4.	iron	7.0 mg/L
5.	lead	<0.02 mg/L
6.	manganese	1.2 mg/L
7.	nickel	0.48 mg/L
8.	zinc	0.14 mg/L

April 18, 1978

Mr. Palin issued a memorandum to Mr. John Pruessner regarding the disposal of asbestos from Borg Warner at the GDC Landfill. Mr. Palin was informed by Mr. Hagen that GDC accepted roughly thirty (30) cubic yards every two (2) weeks from the gasket division of Borg-Warner. The asbestos, according to Mr. Hagen, originated from the cuttings of the asbestos gaskets which are impregnated with a resin to bind the asbestos fibers together.

May 8, 1978

A letter was issued to Mr. Palin from Mr. Ronald Novak, Chief, Hammond Air Pollution Control, regarding a complaint received on May 6, 1978, of a human waste odor alleged to have been emanating from the GDC Landfill. Allegedly, the odor could be detected as far from the GDC Landfill as Munster, Indiana. Mr. Novak stated that he personally investigated and confirmed the source of the odor as the GDC Landfill. Mr. Novak requested that ISBH formally investigate the situation.

May 9, 1978

Mr. Palin inspected the GDC Landfill at 4:45pm in an effort to determine the cause of the odor problem. Mr. Palin, upon arrival, could not detect an odor nor could he determine an origin

to the odor. Mr. Hagen informed Mr. Palin that he believed the source of the odor had been the Gary Sewage Treatment Plant. Mr. Hagen noticed the smell at approximately 5:30pm on May 6, 1978. He drove around and noticed the smell appeared to come from below Fifth Street on Cline Avenue. Mr. Palin drove to the Gary Sewage Treatment Plant, but was unable to detect any odors.

Regarding the GDC Landfill inspection, Mr. Palin calculated a total demerit score of ten (10), an unacceptable rating. Mr. Palin noted that the method of disposal for oily wastes is causing a smell as the refuse is excavated. Lastly, Mr. Palin observed that GDC needed to clean up the oily sludge at the base of the Landfill.

May 24, 1978

A letter was issued to Mr. Novak from Mr. Lamm regarding Mr. Palin's inability to trace the origin of the odor which was alleged to have emanated from the GDC Landfill.

June 20, 1978

Mr. Palin conducted an inspection of the GDC Landfill at 2:30pm. According to the inspection report, an unidentified individual broke into the GDC Landfill on June 18, 1978, and disposed of a load of brown foamy liquid into the sump area of the Landfill. According to Mr. Palin, this substance made his eyes burn and caused a blue smoke to emanate from the sump area. *[It is assumed that the brown foamy liquid was present during Mr. Palin's inspection of the GDC Landfill.]* The brown foamy liquid was pumped out of the sump area and directly into the Landfill. This incident was reported to the Gary Police Department. Lastly, Mr. Palin observed that adjacent U.S. Reduction was generating a significant amount of dust.

August 17, 1978

An inspection was conducted at 5:00pm by Mr. Palin at the GDC Landfill. During this inspection, the operator of the GDC Landfill indicated that the discharge from the sump into the Grand Calumet River occurred approximately three (3) hours each day. Mr. Palin noted that GDC was laying a clay wall for the east side of the GDC Landfill.

September 12, 1978

Mr. Guinn Doyle, ISBH, received a telephone call from Ms. Patrice Fletcher, a representative from Channel 2 in Chicago, Illinois regarding the GDC Landfill. Ms. Fletcher was informed that the SPCB had taken action against GDC for an unpermitted discharge. Ms. Fletcher also inquired as to actions taken against Illinois transporters for illegal disposal at the GDC Landfill.

September 26, 1978

A letter was issued to Dr. Earl N. Caldwell, Health Commissioner, Gary Health Department, 1145 West 5th Avenue, Gary, Indiana, 46402 from Mr. Lamm regarding liquid waste seepage near Cline Avenue and the Grand Calumet River. Mr. Lamm noted that ISBH was unable to perform tests on the submitted sample because of an insufficient amount of the sample and a lack of preservative within the sample itself.

October 20, 1978

Mr. Palin received a telephone call from Ms. Janet Keck of the Hammond Times. She inquired about Calumet Container and their sludge which was to be allegedly placed within a roll-off container then have crushed drums placed on top of such sludge. Ms. Keck questioned whether the GDC Landfill needed a permit for such wastes, noting that the waste might be flammable. Mr. Palin responded that he did not think a permit was necessary.

November 30, 1978

An inspection was conducted of the GDC Landfill by Messrs. Palin and Hunt at 4:12pm at the GDC Landfill. Mr. Palin noted that GDC was managing oil sludge via a pond.

January 3, 1979

An inspection of the GDC Landfill was conducted by Mr. Oliver at 3:30pm. Mr. Oliver noted that the aluminum dross waste was continuing to be disposed at the GDC Landfill without any adverse impacts. Mr. Oliver noted that paper continued to be a problem. A total demerit score of three (3) was calculated and the GDC Landfill was rated as acceptable.

February 13, 1979

Mr. Palin received a telephone call from Mr. Hagen regarding a January 26, 1979, letter issued by Mr. Palin to Mr. Hagen regarding the disposal of wastewater from LaSalle Steel. Mr. Hagen advised that he had called Mr. Jack Hall at LaSalle Steel and Mr. Bill Bogner at General Drainage to determine the final disposition of the wastewater because, Mr. Hagen contended, he had not received such waste from LaSalle Steel. Mr. Hagen informed Mr. Palin that Mr. Bogner's secretary had made an error on the SPC-17 report form and the wastewater from LaSalle Steel was actually disposed at the CID Landfill in Illinois.

March 1, 1979

A letter was issued to Mr. Steve Zlatos, Deputy Attorney General, from Mr. Joseph W. Karen, Hearing Officer, SPCB, regarding the Notices of Hearing, Cause No. B-406, issued to GDC on February 3, 1977, and July 27, 1978. Mr. Karen requested that the four (4) attached Summary of Evidence Sheets be completed and returned in lieu of the forthcoming hearing. The factual issues included:

1. That GDC failed to construct or operate two (2) separate collection systems for dewatering and leachate per the approval letter issued on June 21, 1973;
2. That GDC pumped leachate to the Grand Calumet River instead of trucking the leachate to the Gary Sanitary District as required by the approval letter of June 21, 1973;
3. That GDC accepted liquids, sludges, and other hazardous wastes; and
4. That GDC operated a landfill without a valid SPC-18 operating permit.

April 18, 1979

An inspection of the GDC Landfill was conducted by Mr. Palin at 10:15am. Mr. Palin calculated a total demerit score of ten (10) for the GDC Landfill, an unacceptable rating. Mr. Palin observed that GDC was constructing a clay wall, approximately eight (8) to ten (10) feet in thickness, along the north side of the pit. The drainage from the bottom of the pit was draining into the discharge pit. Mr. Palin noted that the drainage pipe was not installed between the clay wall and the sand wall. Furthermore, the clay wall did not exist around the entire perimeter of the GDC Landfill.

May 10, 1979

A Notice of Violation and Proposed Agreed Order, Cause No. B-406, was issued to GDC by ISBH. [*Find this Notice of Violation and Agreed Order.*]

June 15, 1979

Messrs. Palin and Oliver, and Mr. Dan Miller, Indiana Attorney General's Office, met at 11:00am with Messrs. Hagen and David Cohen, Mr. Hagen's attorney (3701 Main Street, East Chicago, Indiana, 46312), at Mr. Cohen's office to discuss the various violations observed at the GDC Landfill. It was determined that an Agreed Order could be crafted to allow the site to continue to operate. The Agreed Order would contain the following provisions:

1. the violation of accepting hazardous waste will be dropped and a substantial fine shall be assessed for future violations;
2. a Construction Plan Permit amendment will be submitted addressing the correction of the leachate and groundwater problems;
3. the Agreed Order shall serve as an operating permit; and

4. a \$1,000 fine shall be assessed for the discharge of contaminants into the Grand Calumet River.

August 24, 1979

An inspection of the GDC Landfill was conducted by Mr. Oliver at 9:00am. He calculated a total demerit score of sixteen (16), an unacceptable score. Mr. Oliver observed four (4) acres of compacted, but uncovered refuse on the northeastern portion of the GDC Landfill. Also, he noted trenches being dug into the clay bottom of the GDC Landfill were filling with water. Lastly, Mr. Oliver noted that truck drivers were scavenging, a practice that was not allowed.

October 30, 1979

An inspection of the GDC Landfill was conducted by Mr. Oliver at 11:00am. Mr. Oliver noted that the hazardous waste being disposed on-site needed to be placed with the other solid waste and covered at the end of the day. Additionally, Mr. Oliver observed that approximately one (1) acre of the GDC Landfill was exposed on the northeastern corner. Lastly, a trench that had been excavated in an old portion of solid waste was being utilized to dispose of oil. A total demerit score of ten (10) was calculated, an unacceptable rating.

November 8 & 9, 1979

Mr. Oliver had several conversations with representatives of both the U.S. Reduction Company and Industrial Disposal, Inc. regarding the disposal of an aluminum oxide material at the GDC Landfill. Mr. Oliver had learned that the aluminum oxide material contained thirty (30) to forty (40) percent chloride salts that produced an exothermic reaction when disposed with the general refuse. Mr. Oliver noted that this aluminum oxide material was not the material approved in the June 16, 1976 letter which was approved at three (3) to six (6) percent chloride salts. Mr. Dan McCartle of Industrial Disposal, Inc. and representatives from U.S. Reduction requested that ISBH allow the GDC Landfill to accept this waste until November 19, 1979, at which time all parties would meet to discuss an appropriate course of action. Mr. Oliver informed Mr. McCartle and Mr. Julius Gordon (U.S. Reduction) that the aluminum oxide waste could not be disposed at the GDC Landfill unless it had received previous approval.

November 16, 1979

The Agreed Order discussed during the June 15, 1979, meeting between representatives of ISBH and GDC was drafted and issued to Mr. Hagen's attorney, Mr. Cohen, by Mr. Karen. The letter noted that it was his intent to place the matter on the agenda of the SPCB for their December 18, 1979 meeting.

November 27, 1979

A letter was issued to Mr. Hagen approving the continued disposal of three hundred (300) tons per day of aluminum dross from U.S. Reduction at the GDC Landfill until June 15, 1980. The approval letter was conditioned on the following requirements:

1. The aluminum dross waste was to be disposed in a specially prepared disposal area, separate from the general refuse disposal area, and covered with a minimum of twelve (12) inches of soil at the end of the working day;
2. The generator and/or hauler must contact the GDC Landfill for disposal time notification purposes and conditions of shipment;
3. At least one (1) foot of compacted soil will separate refuse from all aluminum drosses;
4. The working face of the aluminum dross disposal area shall be kept to a minimum and any aluminum dross waste not covered with soil shall be misted with water to control fugitive dust; and
5. Progress reports will be submitted by U.S. Reduction Company and GDC to the Solid Waste Management Section before February 20, 1980, and again before May 24, 1980, explaining progress made to improve waste management and disposal practices.

December 18, 1979

An Agreed Order was issued to Mr. Hagen by ISBH. [Check this information and Cause No.; also, see June 15, 1979 entry.]

January 23, 1980

A letter was issued to Mr. Doyle from Mr. Jonathan T. McPhee, U.S. EPA Region V, regarding a conversation on January 17, 1980, discussing a draft Agreed Order, Cause No. B-406, for the GDC Landfill. Mr. McPhee provided his comments of the draft Agreed Order.

March 3, 1980

An inspection of the GDC Landfill was conducted by Mr. Oliver at 5:30pm. Mr. Oliver calculated a zero (0) total demerit score for the Landfill, noting that it was operating in an acceptable fashion. Mr. Oliver noted a brown colored water flowing into the depression adjacent to the Vulcan Materials property. Additionally, American Admixtures, noted Mr. Oliver, was utilizing this brown colored water and there was no need to pump into the Grand Calumet River. Lastly, Mr. Oliver observed that the clay wall is being constructed along the western boundary of

the site and the proposed leachate collection system was not being installed per the engineering drawings.

March 30, 1980

An inspection of the GDC Landfill was conducted by Mr. Oliver at 5:30pm. Mr. Oliver observed that a brown colored liquid was flowing into the depression adjacent to the Vulcan Materials facility. A total demerit score of zero (0) was calculated, an acceptable score.

May 13, 1980

A letter was issued to Mr. Hagen from Mr. Hert regarding the approval for disposal of fifteen thousand (15,000) cubic yards of fly ash from the Union Carbide, 4500 Kennedy Avenue, East Chicago, Indiana, at the GDC Landfill. Mr. McArdle of Industrial Disposal had made this particular request on March 25, 1980. The approval was conditioned on the following requirements:

1. The generator and/or hauler must contact the GDC Landfill to provide notification of the time of disposal and conditions of the shipment;
2. The fly ash shall not be placed in water; and
3. The fly ash shall not be used for daily or final cover.

May 14, 1980

A letter was issued to Mr. Hagen from Mr. Hert regarding the approval for disposal of asbestos material from the Amoco Oil Company ("Amoco"), Whiting, at the GDC Landfill. The letter approved forty (40) cubic yards per week for the first four (4) weeks, and twenty (20) cubic yards every other week thereafter. Mr. James Evenhouse of Calumet Waste Systems had made this particular request on April 16, 1980. The approval was conditioned on the following requirements:

1. The asbestos waste must be placed in bags which are sealed at the plant site;
2. The operator must wear a mask during the disposal of this material; and
3. The asbestos waste is to be mixed with refuse and covered with a minimum of six (6) inches of soil cover by the end of the working day.

May 20, 1980

The SPCB approved Agreed Order, Cause No. B-406, negotiated between GDC and ISBH. Among other requirements, the Agreed Order required GDC to submit an application for a modification of its original construction permit within one hundred and eighty (180) days of May 20, 1980. This Agreed Order specified that it would be a provisional operating permit for no greater than one (1) year from its effective date. Furthermore, the Agreed Order contained many operating conditions. [*Find this Agreed Order.*]

June 19, 1980

An inspection of the GDC Landfill was conducted by Mr. Oliver at 3:15pm. Mr. Oliver noted that blowing litter was a problem and calculated a total demerit score of three (3), an acceptable rating.

July 25, 1980

An inspection of the GDC Landfill was conducted by Mr. Oliver at 8:45am. Mr. Oliver observed that one (1) or two (2) loads of aluminum dross waste had been disposed at the GDC Landfill and required daily cover. A total demerit score of zero (0) was calculated, an acceptable rating.

August 25, 1980

A letter was issued to Mr. Hagen from Mr. Hert regarding the one-time approval for disposal of one hundred (100) cubic yards of asbestos material at the GDC Landfill. The asbestos material was removed from the Ken Industries property on North Sheffield Avenue by representatives from Amoco in Whiting, Indiana. Amoco had made this particular request on July 22, 1980. The approval was conditioned on the following requirements:

1. The generator and/or hauler must contact the GDC Landfill to provide notification of the time of disposal and conditions of the shipment;
2. Appropriate protective clothing should be used during handling and disposal to ensure proper protection from exposure to the material, especially contact with eyes, skin, and inhalation;
3. All asbestos must be sufficiently dampened to prevent airborne contamination during compaction;
4. The asbestos waste is to be mixed with refuse and covered with a minimum of six (6) inches of soil cover by the end of the working day; and
5. All the fire material and debris and any drums that may be located near asbestos material are to remain and are not to be considered as a part of the approval. [*It*

*appears that there may have been a fire at the Ken Industries property.
Determine the operations of Ken Industries.]*

September 19, 1980

An inspection of the GDC Landfill was conducted by Mr. Oliver at 11:30am. Mr. Oliver noted that daily cover had not been applied for two (2) or three (3) days. Additionally, Mr. Oliver noted that a "hot spot" was observed on the south bank near the Grand Calumet River. A total demerit score of five (5) was calculated, an unacceptable rating.

October 20, 1980

Mr. Cohen issued a letter to Mr. Tite regarding his lack of progress on developing a plan for the re-engineering and re-construction of the GDC Landfill pursuant to the Modified Construction Plan required under the Agreed Order issued in [April ?] 1980. Mr. Cohen noted Mr. Tite's procrastination and the expiration of Mr. Hagen's allotted time in which to complete and submit the Modified Construction Plan. Mr. Cohen requested a response by October 27, 1980.

October 30, 1980

A letter was issued to Mr. Hagen from Mr. Hert regarding the one-time approval for disposal of seven hundred (700) cubic yards of asbestos-contaminated material at the GDC Landfill. The asbestos material was removed from the Cities Services Refinery in Gary, Indiana. The Lloyd L. Hodges Company in Gary, Indiana had made this particular request on September 17, 1980. The approval was conditioned on the following requirements:

1. The generator and/or hauler must contact the GDC Landfill to provide notification of the time of disposal and conditions of the shipment;
2. All asbestos must be sufficiently dampened to prevent airborne contamination during compaction; and
3. The asbestos waste is to be mixed with refuse and covered with a minimum of six (6) inches of soil cover by the end of the working day.

November 14, 1980

GDC submitted its application for a modification of its original construction permit as required under the Agreed Order approved by the SPCB on May 20, 1980.

An inspection of the GDC Landfill was conducted by Mr. Oliver at 8:00am. Mr. Oliver noted that several areas did not have daily cover. Additionally, the aluminum dross waste, considered by Mr. Oliver to be a hazardous waste, was not being provided with a daily cover. Lastly, water and leachate were observed seeping into the GDC Landfill along the western boundary. A total demerit score of fourteen (14) was calculated, an unacceptable rating.

November 18, 1980

GDC submitted its Part A Hazardous Waste Permit Application ("Part A") to EPA Region V. Mr. Hagen signed the Part A on November 14, 1980. Section II.C notes that GDC is a facility which currently results in discharges to waters of the U.S.. Also, Section II.E is marked that GDC does or will treat, store, or dispose of hazardous wastes. Section XII, describing the nature of GDC's business, states that GDC engages in landfill disposal of general municipal, commercial, and industrial refuse, and other permitted industrial wastes.

Because GDC noted in Section II.E that it does or will treat, store, or dispose of hazardous wastes, it completed a Part A Form 3. Section II.A of Form 3 lists the initial construction or operation date of the GDC Landfill as July 1, 1973. Section III.B, requesting information on the process design capacity, lists the process code as D80 (landfill disposal) and the amount as one hundred (100) acre-feet. Section IV of Form 3 provided information regarding the hazardous wastes managed or to be managed at the GDC Landfill. The following EPA Hazardous Waste Codes were listed:

- F006 (wastewater treatment sludges from electroplating operations)
- K087 (coal tar decanter tank sludge)
- F005 (spent non-halogenated solvents: toluene, MEK, carbon disulfide, benzene, etc.)
- F003 (spent non-halogenated solvents: xylene, acetone, MIBK, methanol, etc.)

GDC listed 8.6, 2.0, 0.3, and 0.3 acre-feet, respectively, for the amounts of the above-listed hazardous wastes to be disposed at the GDC Landfill. *[This is peculiar as this should have been reported as pounds, tons, kilograms, or metric tons, not acre-feet. Section IV does not provide for an acre-feet measurement. Furthermore, Section IV notes that the GDC Landfill also accepted or planned to accept 0.2 and 6.1 acre-feet of two (2) other hazardous waste streams not associated with EPA Hazardous Waste Codes. The 0.2 acre-feet of hazardous waste was listed as co-disposal of calcium sulfate from IND 047 030 226, also known as U.S.S. Lead Refinery, Inc., located in East Chicago. The 6.1 acre-feet of hazardous waste was listed as co-disposal of terminal wastewater treatment sludge from IND 005 444 062, also known as U.S. Steel, Gary Works, located in Gary. This was accompanied by a notation that this would be a future hazardous waste stream for disposal and that it was currently stored at the manufacturer's plants.]*

The facility's geographic location is described as 41° 36' 55.3" North Latitude and 87° 25' 39.5" West Longitude in Section VII of Form 3. The facility drawing in Section V notes that the GDC Landfill occupies only a 208' x 208' section of the GDC site. A topographic map accompanying Form 3 identifies three (3) outfalls along the south border of the GDC facility and adjacent to the Grand Calumet River. The topographic map also identifies the 208' x 208' Landfill as the "hazardous waste management (HWM) location."

December 6, 1980

A letter was issued to Mr. Hagen from Mr. Hert regarding the approval for disposal of twenty-five (25) cubic yards per year of metal shavings from the Standard Steel Specialty Company at the GDC Landfill. Dombrosky & Holmes, Inc., 5051 South Western Boulevard, Chicago, Illinois, 60609, (312) 778-1400 ("D & H"), had made this particular request on October 28, 1980. The approval was conditioned on mixing the refuse with the metal shavings and covering it with a minimum of six (6) inches of daily cover.

December 17, 1980

A letter was issued to Mr. Hagen from Mr. Hert regarding the one-time approval for disposal of three hundred (300) cubic yards of asbestos-containing pipe insulation waste at the GDC Landfill. The asbestos waste was generated by the former Ashland Chemical Plant in Hammond, Indiana. Brandenburg Demolition, Inc. had made this particular request on November 7, 1980. The approval was conditioned on the following requirements:

1. The generator and/or hauler must contact the GDC Landfill to provide notification of the time of disposal and conditions of the shipment;
2. Appropriate protective clothing should be used during handling and disposal to ensure proper protection from exposure to the material, especially contact with eyes, skin, and inhalation;
3. All asbestos must be sufficiently dampened to prevent airborne contamination during compaction; and
4. The asbestos waste is to be mixed with refuse and covered with a minimum of six (6) inches of soil cover by the end of the working day.

January 8, 1981

An inspection of the GDC Landfill was conducted by Mr. Oliver at 5:00pm. Mr. Oliver noted that the solid waste was not being managed with a 3:1 slope. Additionally, a representative of the GDC Landfill stated that daily cover could not be applied for the solid waste that was

disposed on this date due to an equipment problem. A total demerit score of nine (9) was calculated, an unacceptable rating.

January 9, 1981

A letter was issued to Mr. Hagen from Mr. Hert regarding the one-time approval for disposal of fifty (50) cubic yards of asbestos waste at the GDC Landfill. The asbestos waste was generated by the Lever Brothers Company ("Lever Brothers"). Lever Brothers had made this particular request on December 15, 1980. The approval was conditioned on the following requirements:

1. The generator and/or hauler must contact the GDC Landfill to provide notification of the time of disposal and conditions of the shipment;
2. Appropriate protective clothing should be used during handling and disposal to ensure proper protection from exposure to the material, especially contact with eyes, skin, and inhalation;
3. All asbestos must be sufficiently dampened to prevent airborne contamination during compaction; and
4. The asbestos waste is to be mixed with refuse and covered with a minimum of six (6) inches of soil cover by the end of the working day.

January 14, 1981

A letter was issued to Mr. Hagen from Mr. Hert regarding the approval for disposal of eighty thousand (80,000) cubic yards of fly ash from the Union Carbide Corporation ("Union Carbide"), 4500 Kennedy Avenue, East Chicago, Indiana, at the GDC Landfill. Union Carbide had made this particular request on October 24, 1980. The approval was conditioned on the following requirements:

1. The generator and/or hauler must contact the GDC Landfill to provide notification of the time of disposal and conditions of the shipment;
2. The fly ash shall not be placed in water; and
3. The fly ash shall not be used for daily or final cover.

February 21, 1981

A letter was issued to Dr. Caldwell from Ms. Sandra S. Gardebring, Director, Enforcement Division, U.S. EPA Region V, regarding potential public health problems identified

during an inspection of the GDC Landfill by U.S. EPA Region V inspectors. Specifically, a night inspection revealed the presence of hundreds of thousands of rats at the GDC Landfill.

March 6, 1981

A letter was issued to Mr. Steve Wakefield, ISBH, from Mr. Sam Luri, Vice President, D & H, regarding a request to dispose of thirty-four (34) fifty-five (55) gallon drums and one (1) five (5) gallon container of paint waste from the Union Tank Car Company ("Union Tank"), located at 151st Street & Railroad Avenue in East Chicago, Indiana, at the GDC Landfill. Union Tank's EPA I.D. No. was listed as IND 005 456 058. D & H's EPA I.D. No. was listed as INT 190 019 877. In an attempt to gain approval, D & H provided the following information related to the request for disposal:

1. The waste stream was a "FO 17" [F017] hazardous waste;
2. The waste analysis was performed by Gabriel Laboratories; and
3. The contact for Union Tank was listed as Mr. Raymond Laudan and could be contacted at (312) 374-5250.

The approval request did include the statement, "approximately 2500 drums per year." It is not clear if this approval was ever granted by ISBH.

April 21, 1981

An inspection of the GDC Landfill was conducted by Mr. Oliver at 10:30am. Mr. Oliver observed that Union Carbide coal ash/slag was being accepted for disposal at the GDC Landfill. Mr. Oliver calculated a total demerit score of zero (0), an acceptable rating.

May 8, 1981

A letter was issued to Mr. Oliver from Mr. Hagen regarding a clarification on the status of the Gary Municipal Dump [*currently known as the Gary Landfill*]. Semantically, Mr. Hagen inquired as to whether the Gary Municipal Dump was actually a permitted landfill or whether it was an unpermitted dump. Mr. Hagen referenced a May 4, 1981 letter from Calumet Waste Systems arguing that it was not an unpermitted dump.

May 26, 1981

A letter was issued to Mr. Hagen from Mr. Dan B. Magoun, Supervisor, Conventional Waste Program, Solid Waste Management Section, Division of Sanitary Engineering, ISBH, regarding Mr. Hagen's May 8, 1981 inquiry. Mr. Magoun noted that the Gary Municipal Dump was not a permitted sanitary landfill pursuant to 330 IAC 4-1-1 (SPC 18), nor had it ever held a

permit. Furthermore, Mr. Magoun noted that the Gary Municipal Dump was evaluated by ISBH on September 19, 1980 and was found to have failed the criteria pertaining to disease vectors and fire hazards. Also, he noted that the SPCB had initiated a civil action in Lake County Circuit Court against the City of Gary for unacceptable operation of the site.

June 4, 1981

Mr. Hagen completed and signed a EPA Notification of Hazardous Waste Site Form, pursuant to section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") of 1980. In Section D, Mr. Hagen noted that waste disposal operations began in 1976 and continued to 1981, presumed to mean "the present." Mr. Hagen selected Option 2 in Section E. This option allowed Mr. Hagen, apparently familiar with characteristic and listed hazardous wastes under RCRA, to delineate those hazardous waste codes for hazardous wastes accepted at the GDC Landfill. Similar to the Part A filed by Mr. Hagen on November 18, 1980, he listed both F006 and K087 as hazardous waste streams handled by the GDC Landfill. In Section F, Mr. Hagen listed that his facility was a landfill and noted the estimated combined quantity of hazardous wastes at the site to be ninety-seven thousand six hundred and eighty (97,680) cubic yards over sixty-two (62) acres. Lastly, Mr. Hagen indicated that there were no known, suspected, or likely releases of wastes to the environment from the GDC Landfill.

June 9, 1981

Similar to Mr. Hagen of the GDC Landfill, Mr. Jeffrey Diver, counsel for Indiana Waste Systems, Inc. ("Indiana Waste"), P.O. Box 250, Valparaiso, Indiana, 46368, completed and signed a EPA Notification of Hazardous Waste Site Form, pursuant to Section 103 of CERCLA of 1980. Mr. Diver's phone number was listed as (312) 654-8800. *[It appears that EPA was attempting to gather Superfund-related information from suspected potentially-responsible parties, one of which being Indiana Waste, an alleged transporter of waste to the GDC Landfill. Additionally, it appears that Indiana Waste is/was a subsidiary of and Mr. Diver was an employee for Waste Management, Inc.]* Mr. Diver completed the above-noted form for Mr. W. Brand Bobosky, Assistant Secretary, Indiana Waste, 900 Jorie Boulevard, Oakbrook, Illinois, 60521. Indiana Waste listed the GDC Landfill as the site location under Section B. A notation by Mr. Diver stated that GDC asserts the GDC Landfill is under RCRA interim status. However, notes Mr. Diver, EPA Region V staff advised Indiana Waste that the GDC Landfill does not have interim status under RCRA although a Part A was filed. Option 1 of Section E was completed by Indiana Waste, as contrasted with Option 2 by Mr. Hagen. Under the heading, "General Type of Waste," Indiana Waste listed numerous wastes, including organics, inorganics, solvents, heavy metals, mixed municipal waste, unknown, incinerator residues, and oil sludge. Regarding the heading, "Source of Waste," Indiana Waste listed construction, fertilizer, iron/steel foundry, general chemical, utility companies, lab/hospital, unknown, and refineries. Section F, "Facility Type," notes both landfill and below ground drums. Specific information was not provided on such drums.

July 10, 1981

An inspection of the GDC Landfill was conducted by Mr. Oliver and Ms. Mary Janet Roe at 10:30am. They inquired as to the shredder material from the East Chicago Incinerator. Mr. Hagen stated that only recently had the shredder material been accepted for disposal at the GDC Landfill. Mr. Hagen stated that residue from the East Chicago Incinerator is not being accepted for disposal at the GDC Landfill. No demerit score was calculated as this was not a complete inspection.

August 20, 1981

Mr. Oliver inspected the GDC Landfill at 12:10pm. Mr. Oliver calculated a total demerit score of ten (10), an unacceptable rating. During the inspection, Mr. Oliver obtained Manifest Nos. 7302-12750 and 7302-12685 from Jones & Laughlin Steel Company that listed tar decanter sludge [*presumably a K087 listed hazardous waste*] and central waste treatment plant sludge, respectively. According to Mr. Oliver, both waste streams were received for disposal at the GDC Landfill on August 19, 1981. Mr. Oliver indicated that the central waste treatment plant sludge had not been provided with daily cover. Additionally, a clay wall was being constructed along the western boundary of the GDC Landfill. Lastly, the leachate collection system was not being constructed per the engineering drawings.

October 20, 1981

An inspection of the GDC Landfill was conducted by Messrs. Oliver and Bill Morgan at 10:15am. A total demerit score of zero (0) was calculated, an acceptable rating.

January 8, 1982

An inspection of the GDC Landfill was conducted by Messrs. Oliver and Stu Miller at 9:30am. He calculated a total demerit score of zero (0), an acceptable score. Messrs. Oliver and Miller observed foundry sand being utilized for daily cover.

February 10, 1982

A letter was issued to Mr. Lamm, Director, Division of Land Pollution Control, ISBH, from Mr. Thomas E. Ponicki, Director, Department of Public Works, Town of Munster, requesting the current status, including information related to environmental violations, of the GDC Landfill.

February 16, 1982

Two (2) letters were issued to Mr. Hagen by the Indiana Environmental Management Board ("EMB"). [*The EMB had replaced the SPCB as the entity responsible for landfill*]

permits.] The first letter approved the amended construction plans, submitted on November 14 and received on November 17, 1980, for Construction Plan Permit No. SW-133. The GDC Landfill was previously issued a construction plan permit on June 21, 1973.

The second letter renewed GDC's Operating Permit No. 45-2, with both approval letters subject to nine (9) conditions, including:

1. That sandy, granular material under the Unified Soil Classification of SW and SP not be used for daily cover;
2. That the clay perimeter seal be compacted to 90% Standard Proctor density;
3. That results of compaction tests conducted on the perimeter seal be submitted to the Division of Land Pollution Control staff within 15 days of completion of the tests;
4. That after each section of leachate collection pipe is installed, it be inspected by a Division of Land Pollution Control staff member before it is covered; and
5. That the discharge of water from the site to the Grand Calumet River or other waters of the State of Indiana shall not occur except in conformity with an approved NPDES permit.

According to the Operating Permit No. 45-2 renewal certificate, the permit renewal would expire on March 1, 1984. *[Apparently, there is a second letter, but it is nowhere to be found. The February 16, 1982 letter only lists five (5) conditions, not nine (9). Need to check with EPA for the second page which is assumed to be missing. Allegedly, there is also a requirement for the quarterly sampling of the GDC Landfill monitoring wells and for the termination of hazardous waste disposal, as defined in 330 IAC 4-2-1, within sixty (60) days.]*

March 11, 1982

A letter was issued by Mr. Terry K. Hiestand, Mr. Hagen's attorney, to the EMB requesting a hearing pursuant to IC 13-7-10-5(b). Mr. Hiestand appealed the conditions approved in both letters issued by the EMB on February 16, 1982.

March 23, 1982

A letter was issued to ISBH from Mr. King D. Killin, Vice President, Engineering Department, U.S. Reduction Company, 2025 175th Street, Lansing, Illinois, 60438, requesting the groundwater analyses from the GDC Landfill monitoring wells and surface water discharge analyses for 1979, 1980, and 1981.

April 21, 1982

A letter was issued to Mr. Ponicki from Mr. William L. Morgan, Chief, Facility Inspection Section, Solid Waste Management Branch, Division of Land Pollution Control, ISBH, noting the GDC Landfill had been issued two (2) letters recently, including a letter amending the Construction Plan Permit No. SW-133 and a letter renewing GDC's operating permit No. 45-2. Mr. Morgan stated that Mr. Hagen had appealed portions of both letters in accordance with IC 13-7-10-4(a) and IC 13-7-10-5(b).

June 1, 1982

A letter was issued to Mr. Richard Shandross, State Implementation Officer, U.S. EPA Region V, from Mr. Palin, Acting Chief, Engineering Section, Technical Support Branch, Division of Land Pollution Control, ISBH, requesting documentation on the status of GDC's interim status permit. Mr. Hagen, noted Mr. Palin, contended that he had filed all the necessary papers in a timely fashion, and that since he had an EPA I.D. No., he must have interim status to accept hazardous waste.

June 10, 1982

A letter was issued to Mr. Palin from Mr. Shandross regarding the regulated status of the GDC Landfill under RCRA. According to Mr. Shandross, GDC had only complied with two (2) of the three (3) prerequisites for obtaining interim status, including the current ownership and operation of an existing hazardous waste management facility as defined at 40 CFR 260.20 and the submission of a Part A before November 19, 1980. However, GDC failed to submit a Notification of Hazardous Waste Activity Form ("Notification Form") to EPA by August 18, 1980. Although the Part A or the Notification Form provides an EPA I.D. No. for a facility, the fact that a facility retains an EPA I.D. No. does not provide proof that a facility has complied with all three (3) prerequisites for obtaining interim status. More specifically, Mr. Shandross noted that Mr. Hagen telephoned U.S. EPA Region V on September 11, 1980 to state that he had never received his Notification Form. Even if Mr. Hagen had filed a Notification Form for the GDC Landfill, according to Mr. Shandross, it would not have been filed in a timely manner and, therefore, interim status should be precluded.

July 7, 1982

A letter was issued to Mr. Hagen from Mr. Andrew F. Livovich, Chemist, Lake County Health Department regarding three (3) water samples obtained from the GDC Landfill as delivered on July 1, 1982. *[Have Rose create a table for inclusion into this document.]*

July 19, 1982

Mr. Copeland Bernauer, ISBH, obtained samples from three (3) wells at the GDC Landfill. Mr. Bernauer noted that there were no caps on the west, south, and north well casings. Additionally, ponding was observed around the west and south casings. Mr. Bernauer noted that the north well was dry. The three (3) samples were delivered to the lab on July 22, 1982 at 8:30am.

July 30, 1982

A letter was issued to the ISBH from Dr. A. William Douglas, Director, Gary Municipal Airport Authority District, regarding the significant bird hazard presented by the GDC Landfill. Also of concern was the increase in vertical elevation of the GDC Landfill. Although no airspace violations were identified, Mr. Douglas promised to keep the ISBH informed.

August 10, 1982

An inspection of the GDC Landfill was conducted by Messrs. Oliver and Miller at 5:00pm. They calculated a total demerit score of nine (9) for the GDC Landfill, an unacceptable rating. Messrs. Oliver and Miller observed leachate on-site as water was flowing through the sides of the GDC Landfill and through the refuse and into a new trench being constructed. Also, they observed shredder fluff being utilized as for daily cover. The new trench being constructed was noted as being constructed too close to the present working area, thus exposing refuse and aluminum dross. According to notes made on the inspection report by Mr. Hagen, the exposed refuse was a result of a (clay) wall collapsing due to heavy rains.

August 25, 1982

Mr. Kyle delivered a Petitioner's First Set of Interrogatories, Requests for Admissions, and Requests for the Production of Documents to Mr. Scherschel for Cause No. N-53.

September 28, 1982

Messrs. Palin, Miller, Oliver, Matthew Scherschel, Ms. Karyl Schmidt met with Messrs. Hagen, Vic Indiano, and John Kyle at the GDC Landfill to discuss the pending legal action by the ISBH. The following observations were made:

1. leachate from the GDC Landfill was being discharged from the American Admixtures Fly Ash Processing Facility ("American Admixtures") into a ditch along the railroad on the eastern boundary of the site;
2. the leachate from the ditch was flowing into the borrow pit in and around the sump pump (Mr. Hagen stated he had attempted to seal the wall on several occasions with little success);

3. Mr. Hagen's description to Mr. Palin of the berm constructed along the western boundary indicated that it was not as wide as prescribed within the construction plan; and
4. the odorous black and red water was leaking into the borrow pit from several locations with the largest problem observed at the northwest corner of the site.

October 2, 1982

Two thousand seven hundred and fifty (2,750) gallons of F005 (spent non-halogenated solvents) hazardous paint sludge waste were manifested (Manifest No. 00134) from American Chemical Services, Inc. ("ACS"), 420 South Colfax Avenue, Griffith, Indiana (EPA I.D. No. IND 01630265X), transported by Independent Waste System ("Independent"), P.O. Box 269, Griffith, Indiana (EPA I.D. No. IND 051942563), and accepted by Mr. Brian Boyd for disposal at the GDC Landfill on October 2, 1982. [*The GDC Landfill was mistakenly listed as Transporter No. 2 on this manifest.*]

October 12, 1982

A Notice of Taking Deposition and Proof of Service was served on Messrs. Palin and Oliver for a deposition to occur on October 14, 1982 at 9:00am.

October 15, 1982

Two thousand seven hundred and fifty (2,750) gallons of F005 (spent non-halogenated solvents) hazardous paint sludge waste were manifested (Manifest No. 00135) from ACS, transported by Independent, and accepted by Mr. Brian Boyd for disposal at the GDC Landfill on October 15, 1982.

October 29, 1982

Two thousand seven hundred and fifty (2,750) gallons of F005 (spent non-halogenated solvents) hazardous paint sludge waste were manifested (Manifest No. 00136) from ACS, transported by Independent, and accepted by Mr. Brian Boyd for disposal at the GDC Landfill on October XX, 1982.

Four (4) water samples were obtained from the GDC Landfill wells and sent to the Lake County Health Department for analysis.

November 3, 1982

A letter was issued to Mr. Hagen from Mr. Andrew F. Livovich, Chemist, Lake County Health Department regarding four (4) water samples obtained from the GDC Landfill as delivered on November 1, 1982. *[Have Rose create a table for inclusion into this document.]*

November 22, 1982

A letter was issued to Mr. Chuck Epstein, Jones & Laughlin Steel Corporation, 3001 Dickey Road, East Chicago, Indiana, 46312, from Mr. Oliver regarding the following pieces of information on their central treatment plant sludge, terminal treatment plant sludge, No. 6 stand oil (bottom sludge and oil), and coke tar decanter sludge:

1. volume of each waste liquid or sludge which was shipped for land disposal on a monthly basis since January 1981;
2. who transported said waste for disposal; and
3. identify the disposal site if it is other than the GDC Landfill. Please identify any other liquids or sludges that you dispose of at the above Landfill.

November 29, 1982

One (1) twenty (20) cubic yard roll-off box of hazardous rubber battery chip waste was manifested (Disposal Service Copy No. 8614) by Mr. John Valocik from U.S.S. Lead Refinery, Inc. ("U.S.S. Lead"), 5300 Kennedy Avenue, East Chicago, Indiana, 46312 (EPA I.D. No. IND 047030226), transported by Industrial Disposal Corporation ("Industrial Disposal"), 2000 Gary Avenue, P.O. Box 59, East Chicago, Indiana, 46312 (EPA I.D. No. IND 044250587), and accepted by Mr. Brian Boyd for disposal at the GDC Landfill on November 29, 1982.

November 30, 1982

A letter was issued to Mr. Scherschel from Mr. Kyle regarding a draft Agreed Order *[determine which Agreed Order]* and answers to the first set of interrogatories. Mr. Kyle stated that a significant issue surrounded the approval for disposal of steel mill sludges from Jones & Laughlin Steel Company.

December 3, 1982

An inspection of the GDC Landfill was conducted by Messrs. Oliver and Miller at 9:10am. A total demerit score of zero (0) was calculated, an acceptable rating.

December 17, 1982

A letter was issued to Mr. Hagen from Mr. Guinn Doyle, Chief, Hazardous Waste Management Branch, Division of Land Pollution Control, ISBH, regarding the regulatory requirements of managing run-off (40 CFR 265.302(b)) from the portion(s) of the GDC Landfill that are active and not closed in accordance with a RCRA closure plan. Mr. Doyle also stressed the importance of performing a hazardous waste determination, pursuant to 40 CFR 262.11, for the collected run-off. If the collected run-off is determined to be a hazardous waste and is discharged through a point source to waters of the United States, then it is subject to Section 402 of the Clean Water Act.

December 28, 1982

An inspection of the GDC Landfill was conducted by Mr. Miller at 10:45am. A total demerit score of zero (0) was calculated, an acceptable rating.

February 10, 1983

An inspection of the GDC Landfill was conducted by Mr. Miller at 8:30am. Mr. Miller calculated a total demerit score of zero (0) for the GDC Landfill, an acceptable rating. Mr. Miller observed that daily cover was being applied and clay was being placed on older disposal areas where leachate was formerly seeping out of the GDC Landfill.

February 18, 1983

The EMB approved Agreed Order, Cause No. N-53, as negotiated between GDC and ISBH. Agreed Order, Cause No. N-53 settled the appeal filed by GDC contesting the imposition of nine (9) conditions placed upon the GDC Landfill by the EMB on February 16, 1982, in renewing Operating Permit No. 45-2. The text of Agreed Order, Cause No. N-53 is below:

**SETTLEMENT AGREEMENT AND
RECOMMENDED AGREED ORDER**

Comes now Petitioner, Gary Development, Inc., by counsel and by Larry Hagen, Vice President and General Manager; and comes now Respondent, the Indiana Environmental Management Board ("EMB"), by Linley Pearson, Attorney General, by Matthew Scherschel, Deputy Attorney General. The parties show the Hearing Officer that they have resolved their differences and ask the Hearing Officer to recommend an order to EMB in accordance with the terms and conditions set forth in Part II below.

I. HISTORY AND BACKGROUND

In early 1973, Petitioner began to explore developing a sanitary landfill in a mined-out, water-filled, sand pit in Gary, Indiana (hereinafter called the "site"). On May 15, 1973, the Indiana Stream Pollution Control Board ("SPCB") approved Petitioner's proposal to dewater the

sand pit. On June 19, 1973, SPCB granted Petitioner Construction Permit SW133, thereby allowing preparatory construction work for a sanitary landfill to begin.

On August 29, 1974, the State conducted its final inspection of the site which led to SPCB's granting final approval to Petitioner to commence sanitary landfill operations. The landfill began accepting solid waste for disposal in September 1974. On February 20, 1975, SPCB sent Petitioner its Operating Permit No. 45-2.

On May 20, 1980, SPCB approved an Agreed Order negotiated between Petitioner and SPCB staff. This Order required that Petitioner submit within one-hundred and eighty (180) days of May 20, 1980, an application for a modification of its original construction permit. This application was timely submitted to SPCB on November 14, 1980.

On February 16, 1982, the Indiana Environmental Management Board ("EMB": in the interim, EMB replaced SPCB as the Indiana agency responsible for landfill permits) notified Petitioner by two (2) nearly identical letters (hereafter called the "February 16, 1982 letter"), indicating that its Operating Permit No. 45-2 had been renewed and that its revised construction plans submitted November 14, 1980, had been approved, both subject to nine (9) conditions. Petitioner thereafter filed a petition for hearing, contesting the imposition of these nine (9) conditions.

Since that time the parties have negotiated the agreement set forth in Part II below, resolving the issues in dispute. The parties request that the Hearing Officer recommend that EMB enter the provisions of Part II below as an Agreed Order in Cause No. N-53.

II. RECOMMENDED AGREED ORDER

It is expressly agreed and understood that the provisions of this Recommended Agreed Order constitute a modification of Petitioner's modified Construction Permit No. SW-133 and Operating Permit No. 45-2. To the extent that this Recommended Agreed Order is inconsistent with these two permits; the drawings and narrative submitted on November 14, 1980; or the State's February 16, 1982 letter, the provisions below shall supersede such inconsistent provisions, and shall govern construction and operations at the site from the date this Recommended Agreed Order is approved by EMB. (This date is hereafter called "the effective date of this Order.")

1. Condition No. 1 in the February 16, 1982 letter, to wit: Sandy, granular material under the unified soil classification SW and SP will not be used for daily cover at the site, remains unchanged.
2. Condition No. 4 in the February 16, 1982 letter, is deleted and replaced by the following:

Petitioner shall notify a staff member of the Indiana Division of Land Pollution Control (hereafter called "staff") by phone at least seven (7) days in advance of the installation of any required leachate collection system on-site, to allow staff to inspect such installation.

- a. After such notification, Petitioner may install the system on the appointed day at the appointed hour, or as soon thereafter as weather permits, whether or not staff is present.
 - b. If staff is not present for such installation, Petitioner shall document with photographs and narrative that the installation complies with Petitioner's amended construction permit.
 - c. Any required leachate collection system shall be installed in compliance with the amended construction permit.
3. Condition No. 3 in the February 16, 1982 letter, regarding the discharge of water from the site into the Grand Calumet River or other waters of the State of Indiana is deleted in its entirety.
 4. Condition No. 6 in the February 16, 1982 letter, is deleted and replaced by the following:

It is not necessary that Petitioner to install the seepage collection pond detailed on page seven (7) of Petitioner's Engineering Plan. Petitioner agrees that no solid waste will be deposited in "standing water;" the phrase "standing water" shall not be construed to mean de minimis amounts of water or small rain-filled puddles.

5. Condition No. 7 in the February 16, 1982 letter, is deleted and replaced by the following:

The Clay Perimeter Seal along the south side of the site shall be constructed to an elevation of 589.7 MSL and shall be at least ten (10) feet wide. The parties expressly agree that the portion of Petitioner's landfill located at the southeastern portion of the site which is completed and at final grade as of December 14, 1982, will not be affected by this requirement.

6. Condition No. 8 in the February 16, 1982 letter, is deleted and replaced by the following:

The four (4) on-site monitoring wells will be sampled on a quarterly basis. The sampling months are January, April, July and October, with samples to be taken at the end of each month and analyzed.

- a. Results of these tests shall be submitted to staff by the end of the following month. The parameters to be tested are chloride, chemical oxygen demand, total hardness, total iron, and total dissolved solids.
7. The modified construction plans approved February 16, 1982, called for compaction of the clay perimeter wall around the site and testing the clay used for constructing this wall in accordance with the 90% Standard Proctor Density Test. Petitioner has found it technically and economically impractical to utilize this test. Respondent has agreed to substitute for this test any test acceptable to staff which will accurately portray the permeability of the clay perimeter wall. Accordingly, Conditions 2 and 3 of the February 16, 1982 letter, are deleted and replaced with the following:
- a. Within forty-five (45) days of the effective date of this Order, or if weather conditions prevent taking the borings within this time period, as soon thereafter as weather permits, Petitioner will have four soil borings (which may be drilled at an angle) taken from the site's west wall, at random locations along the wall, with split spoon samples taken at five-foot depth intervals in each boring. Blowcounts will be recorded for each split spoon sample taken. The soil boring team will visually inspect the split spoon samples taken from each hole drilled and keep a log of their observations to include any identifiable irregularities or voids encountered during drilling. A total of five (5) Shelby tube samples shall be taken from the borings. The Shelby tube samples will be subjected to a hydraulic conductivity test to ascertain the samples' permeability. Test results will be forwarded to staff within fifteen (15) days of their receipt by Petitioner. Staff shall be notified at least seven (7) days in advance of any such boring, and will be given an opportunity to attend and view the drilling. Staff shall not interfere with such operations.
 - b. If the test results show the permeability of the clay wall to be 5.0×10^{-6} centimeters per second or less (i.e. 4.9×10^{-6} , 4.0×10^{-6} , 3.0×10^{-6} , 2.0×10^{-6} , 1.0×10^{-6} , 1.0×10^{-7} , 1.0×10^{-8} , etc.), then no remedial action for the west clay perimeter wall will be required unless staff identifies a significant infiltration of liquid as discussed in subparagraph 7c.
 - c. If the test results show that the permeability of the west perimeter wall is 5.1×10^{-6} centimeters per second or greater (i.e. 5.1×10^{-6} , 6.0×10^{-6} , 7.0×10^{-6} , 8.0×10^{-6} , 9.0×10^{-6} , 1.0×10^{-5} , 1.0×10^{-4} , etc.); or if staff identifies a

significant infiltration problem involving a concentrated flow of liquid into the site through the west wall or emanating from an area of deposited solid waste along that wall, then it is agreed that further negotiations between the parties will be required to determine what remedial action, if any, must be undertaken along the west wall. If the parties are unable to reach an agreement as to such remedial measures, if any, within sixty (60) days of (i) the submission of the test results to the State, or (ii) the date a significant infiltration of liquid, staff notifies Petitioner in writing of a finding of the issue of what remedial action may be required shall be submitted to the Hearing Officer for hearing and decision.

d. Until the soil boring tests are completed with satisfactory results in accordance with subparagraphs "a" and "b" above; or until an agreement is approved, or order entered pursuant to subparagraph "c" above, Petitioner agrees not to construct any further portions of the clay perimeter wall around the site.

i. If said test results are satisfactory in accordance with subparagraphs 7b, and no significant infiltration of liquid is identified in accordance with subparagraph 7c, then construction of the remaining portions of the clay perimeter wall shall proceed in the same manner as the construction of the west wall so as to ensure a permeability factor at least equivalent to the test results for the west wall and to ensure that infiltration of liquid into the site through these newly constructed walls does not occur. In this event, Petitioner will submit narrative to staff describing the method used to construct the west wall and will document the construction of the remaining portions of the clay perimeter wall with pictures and narrative to ensure consistent construction practices.

ii. If said test results are unsatisfactory, or a significant infiltration of liquid is identified in accordance with subparagraph 7c, the parties will attempt to negotiate an acceptable alternative for the construction of the remaining portions of the clay perimeter wall, or failing on agreement, submit the matter to the Hearing Officer for hearing and decision.

8. Condition 9 of the February 16, 1982 letter, is deleted and replaced by the following:

a. Petitioner's landfill will not be excluded from consideration as, and will be considered, one of the several sanitary landfills in Indiana which are,

satisfactory repositories for special or "hazardous waste" as defined in 329 IAC 5-2-1(19) (1982 Cum. Supp.) (hereafter called "special waste"). The parties specifically agree that no "hazardous waste" as defined and identified in 320 IAC 4-3 (1982 Cum. Supp.) (hereafter called "RCRA hazardous waste") shall be deposited at Petitioner's landfill after the effective date of this Order.

- b. Petitioner shall be permitted to continue receiving the following "special wastes" from the effective date of this Order until further action of the Board or Staff:
 - i. U.S. Reduction Dust;
 - ii. Asbestos fill from Borg-Warner and Amoco Oil (which wastestreams were subject to Special Permission letters dated May 17, 1977, and May 14, 1980, respectively);
 - iii. Corn starch and carbon filters from American Maize Products Company (which wastestreams were subject to a Special Permission letter dated February 20, 1976);
 - iv. The following steel mill sludges from J & L Steel Corporation: the Central Treatment Plant Sludge, the Terminal Treatment Plant Sludge, and the Sludge from the 6 Stand Oil Recovery Unit.
- c. After the effective date of this Order, staff will send a letter to the generators of the special wastes listed in subparagraph b above, requesting that the generators submit further information regarding the nature of the wastestreams identified in subparagraph 8b above, to staff within sixty (60) days of receipt of such letter; it is expressly agreed that this 60-day period will be extended by staff for good cause shown. Staff will analyze such updated information, make a final determination whether these listed special wastes may continue to be disposed of at the site, and shall promptly notify the generator of the waste and Petitioner of its decision. Any such decision shall constitute a "final decision." Any such decision shall constitute a "final action" for which Petitioner may file a Petition for hearing before the Board pursuant to IC 4-22-1 (1982) and IC 13-7-11-3 (1982). Any special permission letters issued for these listed wastes shall last one year. Renewal of such letters will be granted if the materials do not change significantly in quality of quantity, and if Petitioner's operation of the site is in compliance with this Agreed Order, and Petitioner's modified construction permit and operating permit.

- d. It is the parties' intention that other "special waste" of similar quality, quantity and composition as; and other "special waste" presenting similar environmental hazards as, the above-listed special wastes will be considered for disposal at the site. The decision whether to allow "special waste" in addition to those listed above to be deposited at Petitioner's site, must be made by staff on a case-by-case basis after considering the physical and chemical composition of the proposed waste as well as current operations at the site. Although it is impossible to make any guarantees in advance, staff agrees in principle that, given satisfactory operations and construction at the site in compliance with this Order; Operating Permit 45-2; and the modified construction plans approved February 16, 1982, wastestreams with similar chemical and physical composition, and wastestreams presenting similar environmental hazards as the special wastes listed in subparagraph "b" above, will be considered suitable for disposal at the site.
 - e. The parties Agree that materials such as debris, wood, construction refuse, steel, etc.; "coal ash," including fly ash and bottom ash (i.e., the resultant "ash" from coal burning); may be disposed of at the site without any special permission letters.
 - f. Petitioner agrees to submit a quarterly report to staff setting forth the types and amounts of "special wastes" disposed of at the site. These reports will be due the same day for the same period as the monitoring well reports referred to in paragraph 6 above.
 - g. Finally, the parties agree to cooperate in good faith in exploring the possibility of depositing the Georgia Pacific paper sludge and municipal treatment plant sludges at the site.
9. The parties agree that Petitioner's Operating Permit and amended Construction Permit shall last for a period of two years from the effective date of this Agreed Order. The renewal of this Operating Permit and amended Construction Permit, or the decision of whether or grant or renew special permission letters referred to in paragraph 8b, 8c and 8d above, shall be based upon Petitioner's compliance with this Agreed Order, Petitioner's modified construction permit and operating permit and IC 13-7. For the purpose of renewals of existing special permission letters (subparagraph 8c), granting and renewal of additional special permission letter (subparagraph 8d), and the renewal of Petitioner's Operating Permit and amended Construction Permit (paragraph 9), the phrase "compliance with this Agreed Order, Petitioner's modified construction permit and operating permit" shall include but not be limited to (1) any de minimus or insignificant variations from the Agreed Order and/or Petitioner's modified construction permit and

operating permit, and/or (2) any inspection report which contains demerits, but which still shows an "acceptable" rating, and/or (3) any unacceptable rating on 40 percent or less of the inspection reports conducted by the State in any 12-month period.

March 1, 1983

An Agreed Order, Cause No. N-53, was issued to GDC by the ISBH that had approved by the EMB. This Agreed Order resolved the appeal filed by GDC regarding the nine (9) conditions placed upon GDC through the approval on February 16, 1982 of both its operating permit renewal and amended construction plan.

April 6, 1983

Mr. Miller inspected the GDC Landfill at 10:30am. Mr. Miller calculated a total demerit score of nine (9), an unacceptable rating. During the inspection, he noted that general refuse had accumulated within standing water at the GDC Landfill.

June 29, 1983

A Potential Hazardous Waste Site Preliminary Assessment (TDD No. R5-8212-02A-085) was completed by Ms. Kathy McCormack and Messrs. Claude Mays and Mark Lunsford of Ecology & Environment, Inc. for the GDC Landfill.

July 5, 1983

On July 5, 1983, the Gary area was subject to a rain event that produced seven (7) inches of rain in a two (2) hour period. As a result, the Grand Calumet River rose above the one hundred (100) year flood stage, thus flooding the GDC Landfill. Mr. Hagen estimated that approximately one hundred million (100,000,000) gallons of water infiltrated the GDC Landfill. He also noted that he had lost two (2) cranes and many pumps.

July 11, 1983

Mr. Miller inspected the GDC Landfill at 12:30pm. Mr. Miller observed two (2) loads of hot lime from Blaw Knox that had been accepted for disposal at the GDC Landfill. In particular, the loads caused a fire on the GDC Landfill. A third load was rejected for disposal. Mr. Miller rated the GDC Landfill as acceptable.

August 25, 1983

An inspection of the GDC Landfill was performed by Mr. Miller at 1:30pm. He noted that the site was in an unacceptable condition as the water from the July 4, 1983 rain event had

not been pumped out by Mr. Hagen. Furthermore, the active disposal area failed to retain adequate daily cover with foundry sand from Blaw Knox being utilized for such purposes. GDC was accepting J & L iron ore dust and slag for use as a road base. Mr. Miller rated the GDC Landfill as unacceptable.

September 7, 1983

A letter was issued to Mr. Anthony Gentile, American Resources Corporation ("American Resources"), P.O. Box 813, Valley Forge, Pennsylvania, 19482, from Mr. Palin regarding the approval of the concept of a solidification process at the American Admixtures facility. Specifically, American Resources, through a August 12, 1983 letter, proposed to solidify industrial liquid waste [*it is unclear if this would include hazardous waste*] with fly ash at the American Admixtures facility located on property occupied by the GDC Landfill. The industrial liquid wastes to be mixed with fly ash, according to Mr. Palin, will need to receive a case-by-case approval by the ISBH. Mr. Palin noted that the maximum amount of liquid industrial waste needed should be one million (1,000,000) gallons. Mr. Palin specified that he approved of the concept only, and not of the actual solidification process itself. Once American Resources has identified liquid industrial wastes for solidification with fly ash, then they must gain the approval of the Technical Secretary of the Environmental Management Board.

September 14, 1983

Messrs. Miller and Roy E. Harbert inspected the Blaw Know Foundry ("Blaw Knox") in East Chicago, Indiana with Mr. William Kepka. According to Mr. Harbert, the sand, slag, and baghouse dust wastes were being disposed at the GDC Landfill. The baghouse dusts from the Blaw Knox electric arc furnace were high in cadmium. [*Mr. Harbert does not state whether Mr. Kepka performed a proper waste determination (EP Toxicity) for the electric arc furnace dust, a potential D006 hazardous waste.*] Mr. Kepka stated that Blaw Knox's corporate attorney advised him to mix the electric arc furnace dust with sand and slag waste. Mr. Harbert told Mr. Kepka that this mixing was considered illegal treatment and a permit would be necessary. Furthermore, Mr. Harbert suggested that a new EP Toxicity test be performed on the electric arc furnace dust so that a proper disposal facility could be selected.

September 27, 1983

A letter was issued to Ms. Karyl K. Schmidt, Chief, Geology/Chemistry Support Section, Land Pollution Control Division, ISBH from Mr. Kyle regarding his conversation with Mr. Michael Burns, U.S. EPA, advising that GDC did not need to fully complete the EPA general questionnaire on TSD facilities. A January 24, 1983 cover letter from GDC to EPA explained that the various hazardous waste streams accepted by the GDC Landfill in 1981 were *de minimus* amount and nature.

October 13, 1983

An inspection of the GDC Landfill was performed by Mr. Miller at 2:45pm. He noted that the site was in an unacceptable condition. The water observed during the August 25, 1983 inspection had not been pumped off-site, although some progress was made, according to Mr. Miller. Mr. Miller again noted that GDC was utilizing foundry sand as daily cover.

November 9, 1983

A letter was issued to GDC from ISBH requesting a clarification as to their regulatory status. *[Find this letter.]*

December 27 & 28, 1983

A inspection of the GDC Landfill was performed by Ecology & Environment, Inc. for U.S. EPA Region V in an effort to complete a Potential Hazardous Waste Site Inspection Report. Samples were obtained from the monitoring wells by Messrs. Paul Hess, John Angelo, Dan Cozza, and Ms. Anne Sause.

December 30, 1983

A memorandum was issued by Ms. Sause regarding the December 28, 1983 sampling event. Ms. Sause noted that samples were obtained from two (2) monitoring wells on the south portion of the property and a ditch along the west property line.

January 3, 1984

The EMB revoked four (4) previously approved special waste disposal permits. The four (4) permits revoked included the Borg-Warner asbestos, the Amoco Oil Company asbestos, the U.S. Reduction milling dust and slag, and the J & L sludge waste. Apparently, the EMB revoked the four (4) permits because of continuing violations of Agreed Order, Cause No. N-53. *[Determine the four (4) special wastes and when they were originally approved.]*

January 5, 1984

Messrs. Oliver, Palin, Scherschel and Miller met with Messrs. Hagen and Kyle to discuss the GDC Landfill. They discussed the July 4 rain event and subsequent GDC Landfill inspections on August 25 and October 13, 1983. Mr. Hagen noted that he had purchased a crane in Louisville, Kentucky for one hundred and thirty seven thousand (\$137,000) dollars. Apparently, the bolts on the crane were cut and Mr. Hagen was required to expend an additional amount of funds to obtain new parts. According to Mr. Hagen, the crane was operational by the end of August, 1983. The parties also discussed the soil borings that were required on the west wall of the GDC Landfill as specified by the Consent Decree *[find out which one this is (N-53?)]*. Standing water was observed in this area, thus making it too wet to perform soil borings. GDC

suggested that Vulcan Materials was the cause of the water problem. Furthermore, GDC stated that, due to the manner in which the wall was constructed, the borings won't tell ISBH anything. The third issue discussed surrounded the special waste revocations issued recently by ISBH to GDC. GDC did not believe that ISBH had just cause to revoke the approvals and, furthermore, it would bankrupt the GDC Landfill. Lastly, the parties also discussed the Samocki Hole and GDC noted that this was where waste from J & L Steel was being deposited. *[Determine if the Samocki Hole is a particular unit within the GDC Landfill itself. Furthermore, determine the nature and specific origin of the J & L Steel waste as it may have been a RCRA hazardous waste stream.]*

January 16, 1984

An inspection of the GDC Landfill was conducted by Mr. Miller at 11:30am. Mr. Miller observed that clay was being excavated and that it appears that clay cover is being provided daily. Mr. Miller rated the GDC Landfill as acceptable.

January 23, 1984

GDC appealed the January 3, 1984 revocation of its four (4) special waste disposal permits.

January 24, 1984

A file memorandum was completed by Mr. Hess discussing the attached inspection report completed by Ecology & Environment, Inc. for the December 27 & 28, 1983 inspection of the GDC Landfill. Of particular interest, the memorandum stated:

"The possibility that hazardous waste deposited at this site might migrate off site via the natural groundwater flow is remote. However, once the facility is closed and the on-site water table is allowed to recover from this negative influence, the question of hazardous waste migration via the groundwater route will have to be reassessed. Therefore, the adequacy of the site's clay liner will have to be evaluated before the site is closed.

The source or sources of any contaminated groundwater found at or near this site becomes a complex problem because there are twelve (12) alleged or known hazardous waste sites within a two (2) mile radius. Five (5) of these sites border the perimeter of this landfill."

January 26, 1984

A letter was issued to the Deputy Attorney General from ISBH regarding the closure requirements necessary of the GDC Landfill. Also the letter noted that GDC must amend the construction plan permit to avoid closure before reaching approved final contours. *[Find this letter.]*

February 8, 1984

A letter was issued to Mr. Kyle from Mr. Karl J. Klepitsch, Jr., Chief, Waste Management Branch, U.S. EPA Region V, regarding Mr. Kyle's October 7, 1983 request to remove the GDC Landfill from RCRA Subtitle C regulation. Mr. Klepitsch stated that the GDC Landfill was required to have a RCRA permit and could not be withdrawn from the system noting, "*RCRA regulations do not provide for waivers of closure or post-closure requirements based upon the quantity of wastes handled.*" Mr. Klepitsch noted that a recent inspection of ACS revealed that thirty-three (33) shipments of F005 hazardous waste were manifested to the GDC Landfill in 1981 and, furthermore, several other shipments of F005 hazardous waste occurred between November 19, 1980 and early 1981. Also, he asserted that classifying paint waste as merely F005 hazardous waste might be incorrect due to heavy metal contamination. Lastly, EPA learned that the ACS wastes were not always mixed with sand to eliminate the characteristic of ignitability. Apparently, such mixing did not begin until late 1981 or early 1982. The letter closes by stating, "*...it is not in the public interest for Gary Development Landfill to be issued an Interim Status Compliance Letter for continued hazardous waste operation.*"

February 29, 1984

A memorandum from Ms. Cynthia Bachunas of Ecology & Environment, Inc. to Mr. Hess noted that the review of the sampling data from the December 27 & 28, 1983 GDC Landfill sampling event was complete.

April 17, 1984

A file memorandum was issued by Mr. Hess regarding the results of the December 27 & 28, 1983 GDC Landfill sampling event. A portion of the memorandum states:

"The organic and heavy metal contaminants found in the water samples obtained from the two (2) on-site monitoring wells are not attributed to this site or its buried hazardous waste. The rationale for this evaluation was drawn from the following on-site observations of the site conditions:

1. *The two (2) monitoring wells are located outside of the pit's clay side-wall lines and clay dike.*
2. *The water table elevation at the two wells and the surrounding area is some 20 to 30 feet above the water table elevation of the landfill.*
3. *The shallow groundwater at both wells is surmised to be flowing towards the open depression near the center of the landfill.*

4. *There are three (3) known hazardous waste areas upgradient of these wells that are credited with their contamination. (The Grand Calumet River is influencing well #1, and the City Service and Conservation Chemical disposal sites are influencing well #2).*

Therefore, these two (2) monitoring wells are considered to be upgradient wells with contamination from other sources.

The organic contaminants found in the "west ditch" sample are attributable to this site. Indiana State Board of Health site inspector have noted the discharge of site leachate to this shallow surface water body. However, the heavy metal contamination of the ditch as indicated by the sample results is attributed to the Vulcan Material Plant's surface impoundment that lies less than 50 feet west of this ditch."

July 26, 1984

A groundwater monitoring sampling event was conducted at the GDC Landfill. [See July 24, 1985 entry.]

August 29, 1984

A formal administrative hearing was held for Cause No. N-146 regarding the January 23, 1984 appeal by GDC of the revocation by ISBH of their four (4) special waste permission letters.

September 10 & 11, 1984

Another formal administrative hearing was held for Cause No. N-146 regarding the January 23, 1984 appeal by GDC of the revocation by ISBH of their four (4) special waste permission letters.

September 19, 1984

An inspection of the GDC Landfill groundwater monitoring program was conducted by Harding Lawson Associates for A.T. Kearney, Inc. as contracted by U.S. EPA Region V. The final report was issued on October 12, 1984.

December 14, 1984

An Comprehensive Monitoring Evaluation ("CME") inspection was performed by ERTEC for the GDC Landfill. The report noted the following:

- *A review of the...checklist shows that virtually every facet of RCRA-required groundwater monitoring is insufficient, inadequate, or completely lacking at this site.*

Because of the magnitude of the problem, HLA [Harding Lawson Associates] did not list every deficiency item noted on the check list on the list of major deficiencies. We feel that the situation is covered by the general statements made on the list of deficiencies (i.e., "...the existing geologic and hydrologic data [are] insufficient," and "...due to the method of construction, the monitoring wells are inadequate for RCRA groundwater monitoring," etc.).

- Few of the documents required by RCRA have been completed. These include: the groundwater monitoring program, the groundwater sampling and analysis plan, and an outline of the groundwater assessment program.*

- Many of the groundwater quality parameters required by RCRA regulations have not been established at the [GDC Landfill].*

- The existing geologic and hydrologic data [are] insufficient.*

- Due to the method of construction, the monitoring wells are inadequate for RCRA groundwater monitoring. The monitoring wells were installed in a hole which was excavated by a backhoe and was then backfilled with sand around a screen. Bentonite or concrete seals were not installed; thus, the wells are subject to contamination from surface [water]. One well (S) [the south well?] was completed utilizing a steel casing, which was observed to be completely rusted through at the surface. All four existing wells contain bottom sediment, but since information concerning the original well depths was not available, the efficacy of the well screens could not be determined. In the event [the GDC Landfill] is required to do RCRA monitoring, new wells will have to be installed and properly completed in order to meet existing regulatory standards.*

- Suitable water collection, sample preservation, and chain-of-custody and preparation procedures have not been developed [nor] utilized.*

- Since existing ground elevations at the site were not available, conclusive information concerning the direction of groundwater flow and hydraulic gradient could not be determined at this time.*

February 11, 1985

The Division of Land Pollution Control, ISBH received GDC's operating permit renewal application for the GDC Landfill.

March 15, 1985

Judge James M. Garrettson, Hearing Officer of the Indiana Environmental Management Board, denied a petition to introduce newly discovered evidence by GDC for Cause No. N-146.

March 18, 1985

A letter was issued to Mr. Hagen from Mr. Klepitsch formally requesting GDC to submit its Part B permit application for the GDC Landfill.

March 29, 1985

A letter was issued to Mr. Hagen from Mr. Jeffrey W. Stevens, Division of Land Pollution Control, ISBH, regarding GDC's failure to submit proof of financial assurance for closure/post-closure or liability coverage pursuant to 320 IAC 4-7-1 through 4-7-36.

April 1, 1985

Judge Garrettson issued his Findings of Fact, Conclusions of Law, and Recommended Order for Cause No. N-146. [*Fill in Findings and Recommendations*].

Judge Garrettson's Conclusions of Law were:

1. GDC was not in compliance with the Agreed Order, [Cause No. N-53], of February 18, 1983;
2. GDC was not in compliance with its [Construction Permit No. SW-133], as amended, of February 18, 1983;
3. GDC was not in compliance with its [Operating Permit No. 45-2], as amended, of February 18, 1983; and
4. GDC was not in compliance with operating standards on three (3) of four (4) inspections conducted between issuance of the Agreed Order, [Cause No. N-53], on February 18, 1983, and the issuance of the four (4) denial letters on January 3, 1984.

Judge Garrettson's Recommended Order included:

1. That the issuance of the four (4) denial letters on January 3, 1984, is affirmed; and
2. That the Agreed Order [Cause No. N-53] of February 18, 1983, continues in effect and that GDC may apply for permission to dispose of special waste pursuant to that Agreed Order, subject to the following:
 - a. No special waste may be accepted at the GDC Landfill until GDC submits the soil boring contemplated by Paragraph No. 7 of the Agreed Order [Cause No. N-53] of February 13, 1984;

- b. No special waste may be accepted at the GDC Landfill until GDC submits as-built plans to the Respondent evidencing compliance with its amended construction permit;
- c. In the event that GDC requests special permission for the disposal of special waste from one of the sources listed in Paragraph No. 8(b) of the Agreed Order [Cause No. N-53], GDC shall submit with such request such evidence as it may possess as to the quality and quantity of such waste disposed of at the GDC Landfill from February 18, 1983, until the present, and an analysis of the quality and quantity of such waste as is proposed for disposal; and
- d. Until such time as GDC develops promulgated standards for the disposal of "special" waste, the burden of proof as to the issue of whether "special" waste from sources listed in Paragraph No. 8(b) of the Agreed Order [Cause No. N-53] has changed in quality or quantity, shall be on the Respondent.

April 16, 1985

A letter was issued to Mr. Stevens and Ms. Schmidt of ISBH from Mr. Krebs regarding correspondence issued to GDC by Mr. Stevens and Ms. Schmidt on March 29 and April 1, 1985, respectively. Mr. Stevens' letter requested proof of financial assurance for closure under 320 IAC 4-7. Ms. Schmidt's letter requested that GDC submit a groundwater sampling and analysis plan pursuant to 40 CFR 265. Mr. Krebs responded that the GDC Landfill is not a hazardous waste landfill.

May 1, 1985

Letter issued to Mr. Krebs from ISBH in response to April 16, 1985 correspondence.

June 17, 1985

An inspection of the GDC Landfill was conducted by Messrs. Ted Warner and Thomas Russell of the Compliance Monitoring Section and Enforcement Section, ISBH, respectively. During the inspection, Mr. Hagen admitted to accepting twenty-eight (28) to thirty-three (33) loads of manifested paint sludge from ACS in 1980 or 1981. Additionally, Mr. Hagen stated that GDC accepted broken battery cases and neutralized calcium sulfate sludge from U.S.S. Lead. Mr. Warner stated that he believed that the broken battery cases to be a characteristically-lead (D008) hazardous waste. Mr. Hagen was only able to show Mr. Warner compliance with two (2) aspects of the regulatory requirements for hazardous waste landfills: an artificial barrier and control of entry. Mr. Warner observed the leachate collection pond and noted that it was discolored. Mr. Hagen noted that the liquid within the leachate collection pond had never been

sampled. Lastly, Mr. Hagen stated that the four (4) monitoring wells were sampled for only 330 IAC 4 parameters.

July 24, 1985

The results of the groundwater samples obtained during the July 26, 1984, sampling event were submitted by Mr. Gregory A. Busch, Quality Assurance Officer, ISBH, to Ms. Schmidt. The results noted that levels for chemical oxygen demand and total organic carbon are very high in most of the samples, indicating organic chemical contamination. Additionally, there were twenty (20) violations of interim primary and secondary drinking water levels under the Safe Drinking Water Act.

July 30, 1985

A groundwater sampling event was conducted at the GDC Landfill. Four (4) samples were obtained. [See November 13, 1985 entry.]

August 2, 1985

A letter was issued to Mr. Ronald E. Golden, Production Manager, U.S.S. Lead, from Mr. Doyle requesting copies of hazardous waste manifests or other records for hazardous waste shipped to the GDC Landfill.

September 16, 1985

A letter was issued to Mr. D. L. Bidwell, Vice-President and General Manager, U.S.S. Lead, from Mr. Doyle responding to correspondence from U.S.S. Lead on August 14, 1985, requesting clarification of the August 2, 1985 letter requesting information related to hazardous waste shipments to the GDC Landfill. The letter from Mr. Doyle noted that the letter was not an Order, but merely a request and that U.S.S. Lead need not reply to the letter as ISBH would obtain the necessary information through other means.

October 22, 1985

An enforcement referral was issued to Mr. Miner from Mr. Lamm due to GDC's failure to obtain interim status and yet accept hazardous waste for disposal. The referral noted that GDC was in complete violation of 320 IAC 4-6 (40 CFR 265).

November 13, 1985

The results of the groundwater samples obtained during the July 30, 1985, sampling event were submitted by Mr. Busch to Ms. Schmidt. Mr. Busch noted there were twelve (12)

violations of interim primary and secondary drinking water levels under the Safe Drinking Water Act.

November 15, 1985

The EMB held a meeting to discuss the matters related to the GDC Landfill.

December 16, 1985

An inspection of the GDC Landfill was conducted by Messrs. Duane Leith, Engineering Section, Division of Land Pollution Control, ISBH; Steve Schafer, and Richard T. Jones. The individuals walked the site and observed numerous leachate leaks. The west wall had several small leachate leaks which drained into a flooded ditch between the GDC Landfill and Vulcan. The west wall was the wall under scrutiny for proper clay thickness. Although Mr. Hagen claimed to have approximately six (6) to ten (10) feet of clay, the soil borings [*determine when the soil borings were taken*] through the west wall indicated only two and one-half (2.5) feet of clay. Therefore, according to Mr. Jones, the soil boring conditions have not been met according to the court order [*determine which court order this is*]. Additionally, Mr. Jones noted that the monitoring well on the west side of the GDC Landfill was under water. Mr. Jones was also concerned about runoff collected outside the north wall between the railroad tracks and the GDC Landfill. Mr. Jones identified a drainage ditch that bisected the GDC Landfill. Apparently, the collected runoff from the site was pumped into the Grand Calumet River. A telephone conversation between Mr. Leith and Mr. Joseph Kriger, Division of Water Pollution Control, ISBH, on January 7, 1986, revealed that the GDC Landfill did not possess a NPDES permit. Mr. Jones also noted that leachate from the eastern bank was rapidly flowing into the drainage ditch. According to Mr. Jones, the clay utilized for daily cover was being obtained from the drainage ditch, thus complicating the drainage problems.

February 25, 1986

A memorandum was issued to Mr. Miller from Mr. Leith discussing the review of GDC's operating permit renewal application submitted to ISBH on February 11, 1985. Mr. Leith noted that approval of the permit renewal was not recommended due to frequent noncompliance and deviations from the construction plans as approved by Agreed Order, Cause No. N-53, including:

1. *Six of the 28 inspections from August 10, 1982, to August 8, 1985, were rated as unacceptable. The facility has not been substantially in compliance with 330 IAC 4-5-13, therefore, denial is required by 330 IAC 4-8-2(a). Sixty percent of the inspections from the 1983 calendar year were rated unacceptable. This is greater than the 40 percent unacceptable ratings allowed in paragraph 9 of the Agreed Order.*

2. *Item 7 of the Agreed Order specifies soil borings and tests to be performed on the site's west section of the clay perimeter wall. The Order requires that four soil borings be taken. The Order requires that five shelby tube samples be taken, but only four were reported, one from each boring. The information requested on the split spoon samples has not been provided for borings B-1 through B-3. Specifically, the record of blow counts and the log of observations, including any irregularities or voids encountered, must be submitted.*

This detailed information presented from boring B-4 does show that there is only two and one-half feet of clay at nine to 11 1/2-foot depth from the surface. Above this is landfill and clay intermixed, and below the clay is sand. Page 12 of the construction plans, received November 17, 1980, which the EMB approved, and which the February 16, 1982, permit renewal and subsequent order referred to, details the wall construction.

The wall was to have been 25-30 feet in width keyed into the underlying clay to a depth of three feet and with a total depth of over 30 feet. The wall was to slant outward at the top or toward the property line on a one-to-one slope. A vertical boring through the wall under those conditions would encounter 25 feet of clay. The two and one-half foot thickness of clay encountered, shows that the wall thickness is inadequate. It shows that the wall is not keyed into the underlying clay at that point due to the occurrence of sand beneath the clay.

3. *Drainage swale A, as shown on sheet 2 of the plans, has not been properly constructed. There is a low spot in this area in which water ponds.*
4. *Leachate collection components have not been installed, as shown on sheets 3 and 8 of the plans, yet filling has progressed beyond the interim grading stage, shown on sheet 3.*
5. *Leachate seeps, along the central low area and along the north area, are not being controlled or stopped. This leachate flows directly into, or is washed by precipitation run-off, to the surface water collection pond from which it may be pumped into the Grand Calumet River. There are leachate seeps along the west wall near the water ponded in that area.*
6. *The vegetative cover has not been established as on page 12 of the Narrative.*

The following points should also be considered:

1. *The amount of clay available for wall construction and cover visually appears to be inadequate. Calculations based on the renewal map received February 11, 1985, and on the proposed excavation depth of 37 feet, projected adequate*

volume of clay. A recent site visit casts doubt on the accuracy of the renewal map and on the practicality of excavating 37 feet in an area already plagued with voluminous leachate flows, groundwater infiltration, and precipitation accumulation. A survey is needed to closely determine the area remaining for excavation and to project a realistic excavation depth in order to verify the adequacy of clay volume.

2. *Groundwater samples taken on July 26, 1984, and on July 30, 1985, both exhibit groundwater contamination. Levels of numerous parameters are above the interim primary and secondary drinking water levels.*

March 13, 1986

A memorandum was issued to Mr. Miner from Mr. Kenneth Fenner, Chief, Water Quality Branch, U.S. EPA Region V, regarding the possible illegal point-source discharge to the Grand Calumet River by GDC. The memo referenced the December 16, 1985 inspection by representative of ISBH.

March 27, 1986

A letter was issued to Mr. Donald Larson, Chief, Compliance Section, Division of Water Pollution Control, ISBH, from Mr. Michael Mikulka, Chief, Enforcement Unit II, Water Quality Branch, U.S. EPA Region V, regarding an unpermitted discharge from the GDC Landfill into the Grand Calumet River.

April 18, 1986

A file memorandum was issued by Mr. Timothy J. Miller, Geology Section, Division of Land Pollution Control, ISBH, regarding a review of the groundwater sampling results dated November 6, 1985, and February 12, 1986. Mr. Miller noted that, since 1981, GDC has failed to sample for RCRA parameters, including National Primary Drinking Water Standards and the four (4) indicators of groundwater quality. Mr. Miller noted that he has made an enforcement referral to U.S. EPA Region V.

May 27, 1986

An inspection of the GDC Landfill was attempted at 9:00am by Mr. Cleaton. The scale manager informed Mr. Cleaton that Mr. Hagen was not available and would, most likely, be back around 11:00am. Mr. Cleaton informed the scale manager that he would return at 2:00pm and expected Mr. Hagen to be present at that time.

Upon returning at 2:00pm, Mr. Cleaton was informed that Mr. Hagen was still at lunch. Mr. Cleaton provided two (2) copies of his business card to the scale manager and informed him that he would conduct another inspection on June 18, 1986, at approximately 9:00am.

May 30, 1986

A Complaint and Compliance Order (RCRA V-W-86-R-45) was issued to GDC by U.S. EPA Region V. The Findings and Orders are listed below:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

IN THE MATTER OF:

GARY DEVELOPMENT COMPANY, INC.
479 NORTH CLINE AVENUE
P.O. BOX 6056
GARY, INDIANA 46406
IND 077 005 916

DOCKET NO. V-W-86-R-45

COMPLAINT AND
COMPLIANCE ORDER

PREAMBLE

This Complaint and Compliance Order is filed pursuant to Section 3008(a)(1) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 USC §6928(a)(1), and the United States Environmental Protection Agency's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22. The Complainant is the Director of the Waste Management Division, Region V, United States Environmental Protection Agency (hereinafter U.S. EPA). The Respondent is Gary Development Company, Inc., as owner and operator of Gary Development Company, Inc.

This Complaint and Compliance Order is based on information available to U.S. EPA, including the Respondent's Part A of the RCRA Permit Application, dated November 1980; a U.S. EPA contracted ground-water monitoring inspection report dated October 1984; and an inspection report and correspondence from the Indiana State Board of Health (ISBH). Based on the review of these documents, violations of applicable State and Federal regulations have been identified.

Pursuant to Section 3008(a)(1) of RCRA, 42 USC §6928(a)(1), and based on information obtained from review of documents related to site hydrogeology, past inspections of the site, and the Part A of the RCRA permit application, it has been determined that the Respondent is in violation of Subtitle C of RCRA.

Specifically, Respondent has been determined to be in violation of Sections 3004 and 3005, 42 USC §§6924 and 6925, U.S. EPA regulations at 40 CFR 270.1(b), 270.10(a), and the Indiana Administrative Code (IAC), Ind. Rev. Stat. 1985, as amended, and regulations adopted by the Indiana Environmental Management Board, including Title 320 IAC 4.1-38-1; 4.1-34-1(a); 4.1-20-1(a); 4.1-20-2; 4.1-20-3(a) through (e); 4.1-20-4(a) through (f); 4.1-20-5; 4.1-22-24(a) and (b); 4.1-16-4; 4.1-17-3(a) through (c); 4.1-18-2; 4.1-19-2(a)(1) and (5); 4.1-19-7; 4.1-19-4(b)(1) and (2); 4.1-16-6(d); 4.1-16-6(b)(1); 4.1-16-5(c); and 4.1-21-3(a).

JURISDICTION

Jurisdiction for this action is conferred upon U.S. EPA by Section 2002(a)(1), 3006(b) and 3008(a)(2) of RCRA; 42 USC §§6912(a)(1), 6926(b) and 6928(a)(2), respectively.

On August 18, 1982, the State of Indiana was granted Phase I Interim Authorization by the Administrator of U.S. EPA pursuant to Section 3006(b) of RCRA, 42 USC §6926(b), to administer a hazardous waste program in lieu of the Federal program. See 47 Federal Register 3953. As a result, facilities in Indiana qualifying for interim status under 40 CFR 270.70 are regulated under the Indiana provisions found at 320 IAC 4.1, et seq., rather than the Federal regulations set forth at 40 CFR Part 265, Section 3008(a)(2) of RCRA, 42 USC §6928(a)(2), provides that U.S. EPA may enforce State regulations in those States authorized to administer a hazardous waste program. Notice to the State pursuant to this section has been provided by U.S. EPA.

FINDINGS

1. Respondent owns and operates a hazardous waste management facility named Gary Development Company, Inc., located at 479 North Cline Avenue, Gary, Indiana 46406. Respondent is an Indiana Corporation whose registered agent in Indiana is CT Corporation System, 1 North Capitol Avenue, Indianapolis, Indiana 46204.
2. Section 3010 of RCRA, 42 USC §6930, requires any person who generates or transports hazardous waste, or who owns or operates a facility for the treatment, storage, or disposal of hazardous waste to notify U.S. EPA of such activity within ninety (90) days of the promulgation of regulations under Section 3001 of RCRA, 42 USC §6921. Section 3010 of RCRA also provides that no hazardous waste subject to U.S. EPA regulation may be transported, treated, stored, or disposed of unless the required notification has been given.
3. U.S. EPA published regulations concerning the generation, transportation, and treatment, storage or disposal of hazardous waste on May 19, 1980. These regulations are codified at 40 CFR Parts 260 through 265. Notification to U.S. EPA of hazardous waste handling was required in most instances no later than August 18, 1980.

4. Section 3005 of RCRA, 42 USC §6925, requires U.S. EPA to publish regulations requiring each person owning or operating a hazardous waste treatment, storage, or disposal facility to obtain a RCRA Permit. Such regulations were published on May 19, 1980, and are codified at 40 CFR Parts 124, 270 and 271. The regulations require persons who treat, store, or dispose of hazardous waste to submit Part A of the permit application in most instances no later than November 19, 1980.
5. Section 3005(e) of the Act provides that an owner or operator of a facility is authorized to operate a hazardous waste treatment, storage or disposal facility pending final administrative disposition of a permit application provided that: (1) the facility was in existence on November 19, 1980; (2) the requirements of Section 3010(a) of the Act concerning notification of hazardous waste activity have been complied with; and (3) application for a permit has been made. This statutory authority to operate is known as interim status. U.S. EPA regulations implementing these provisions are found at 40 CFR Part 270.
6. Respondent did not file a timely notification of its hazardous waste activity to U.S. EPA, by submission of EPA Form 8700-12, as required by Section 3010(a) of RCRA, 42 USC §6930(a). On September 10, 1980, which is 23 days after the August 18, 1980, deadline for submission of this notification, the Vice-President of the facility called U.S. EPA to request a copy of the form, which he admitted had not been sent to U.S. EPA. To date, no notification form from Respondent is on file at U.S. EPA.
7. On November 18, 1980, Part A of the RCRA permit application was submitted by Respondent as required by Section 3005(a) of RCRA, 42 USC §6925(a), and 40 CFR 270.1(b). The Part A permit application identifies the hazardous waste management process as disposal in a landfill (D80) and identifies the owner and the operator as Gary Development Company, Inc.
8. Interim status has never been achieved by Respondent because the facility failed to notify by August 18, 1980.
9. Part A of Respondent's RCRA permit application lists the following hazardous wastes handled by the facility:
 - a. F006 - wastewater treatment sludges from electroplating operations (320 IAC 4.1-6-2);
 - b. K087 - decanter tank tar sludge from coking operations (320 IAC 4.1-6-3); and
 - c. F003 and F005 - two separate lists of specified, spent, non-halogenated solvents and still bottoms from the recovery of those solvents (320 IAC 4.1-6-2).

10. Pursuant to Title 329 Indiana Administrative Code (IAC) 4.1-10-2, generators of hazardous waste in Indiana must submit to the Technical Secretary of the Indiana Environmental Management Board (EMB) biennial reports which specify to whom their hazardous waste have been sent in the preceding calendar year. These reports must be certified as true by the generators under penalty of law.
- a. EMB has received certified annual reports pursuant to 320 IAC 4.1-10-2 from at least two generators who report that they sent hazardous wastes to Respondent in the calendar year 1981. These generators are Indiana Harbor Works, U.S. EPA I.D. No. IND 005 462 601, and American Chemical Service, U.S. EPA I.D. No. IND 016 360 265.
 - b. Between December 5, 1980, and November 16, 1981, American Chemical Service delivered at least 37 manifested shipments of "flammable liquid paint sludge" to Respondent for disposal. American Chemical Service used hazardous waste number F005 to describe the waste. F005 refers to specific non-halogenated solvents and still bottoms. Each shipment consisted of one (1) tank containing 2,750 gallons.
 - c. U.S. EPA correspondent with Respondent's former attorney, Mr. Kyle, dated February 8, 1984, states that a review of the process generating wastes at American chemical Service was undertaken. The conclusion reached was that any of the following hazardous waste types handled at the American Chemical Service facility might be present in wastes disposed of at Respondent's landfill:
 - (i) Hazardous wastes listed at 320 IAC 4.1-6-2:
 - (A) F001 - listed spent halogenated solvents used in degreasing;
 - (B) F002 - listed spent halogenated solvents and still bottoms;
 - (C) F003 - listed spent non-halogenated solvents and still bottoms;
 - (D) F005 - listed spent non-halogenated solvents and still bottoms;
 - (ii) D001 - Hazardous wastes exhibiting the characteristic of ignitability noted at 320 IAC 4.1-5-2(b); and
 - (iii) Hazardous wastes listed at 320 IAC 4.1-6-4(f):
 - (A) U002 - acetone
 - (B) U031 - 1 - butanol
 - (C) U112 - acetic acid, ethyl ester
 - (D) U147 - 2,5 - furandione
 - (E) U154 - methanol

- d. During an ISBH inspection June 17, 1985, a representative of the facility, Mr. Hagen, stated that Respondent had accepted neutralized acid and broken battery casings delivered by U.S.S. Lead Refinery, Inc. (IND 047 030 226). Such wastes are possibly hazardous due to the characteristics of corrosivity (D002) and high concentrations of lead (D008) (320 IAC 4.1-5-3(b) and 4.1-5-5 respectively). This is asserted in an ISBH memorandum dated July 29, 1985.
11. In a March 18, 1985 letter, U.S. EPA requested Respondent to submit Part B of its application for a RCRA permit pursuant to 40 CFR 270.1(b). To date, neither U.S. EPA nor ISBH has received the Part B from Respondent.
12. Respondent did not submit a Part B permit application, nor certify compliance with applicable RCRA groundwater monitoring and financial requirements by November 8, 1985. Section 3005(e)(2) of RCRA and 40 CFR Part 265 required such permit application and a certification from owners and operators of land disposal facilities in existence on November 19, 1980, in order to continue to operate after November 8, 1985. Therefore, Respondent is precluded from accepting any additional hazardous waste and must close its facility.
13. Harding Lawson Associates, contracted by U.S. EPA, performed a groundwater monitoring inspection at Respondent's facility on September 19, 1984. That inspection determined that Respondent's groundwater monitoring program and monitoring well system did not meet RCRA regulations. The following violations of IAC were identified:
 - a. Failure to implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility (320 IAC 4.1-20-1(a)) by:
 - (i) Installing monitoring wells (at least one) hydraulically upgradient from the limit of the waste management area (320 IAC 4.1-20-2(a)(1));
 - (ii) Installing monitoring wells (at least three) hydraulically downgradient at the limit of the waste management area (320 IAC 4.1-20-2(a)(2));
 - (iii) Ensuring that upgradient wells yield groundwater:
 - (A) Representative of background groundwater quality in the uppermost aquifer near the facility (320 IAC 4.1-20-2(a)(1)(i)); and
 - (B) That is not affected by the facility (320 IAC 4.1-20-2(a)(1)(ii));
 - b. Failure to install wells in a manner that maintains the integrity of the monitoring well boreholes (320 IAC 4.1-20-2(c));

- c. Failure to develop, follow, and keep at the facility a groundwater sampling and analysis plan including procedures and techniques for:
 - (i) Sample collection;
 - (ii) Sample preservation and shipment;
 - (iii) Analytical procedures; and
 - (iv) Chain-of-Custody control (320 IAC 4.1-20-3(a));
- d. Failure to test groundwater quarterly for one year to establish background concentrations of specified parameters in samples obtained from monitoring wells (320 IAC 4.1-20-3(b) and (c)); these parameters are:
 - (i) Those characterizing the suitability of groundwater as a drinking water supply (320 IAC 4.1-20-3(b)(1)) and (320 IAC 4.1-32-3);
 - (ii) Those establishing groundwater quality (320 IAC 4.1-20-3(b)(2)); and
 - (iii) Those used as indicators of groundwater contamination (320 IAC 4.1-20-3(b)(3));
- e. Failure to obtain for the indicator parameters four replicate measurements of each sample collected from upgradient wells to determine initial background arithmetic mean and variance by pooling replicate measurements for specified parameters during the first year of monitoring (320 IAC 4.1-20-3(c));
- f. Failure to obtain and analyze groundwater samples for parameters on an annual or semiannual schedule (320 IAC 4.1-20-3(d));
- g. Failure to determine and record the elevation of the groundwater surface each time a sample is obtained (320 IAC 4.1-20-3(e));
- h. Failure to evaluate groundwater surface elevations annually to determine whether monitoring wells are properly located (320 IAC 4.1-20-4(f));
- i. Failure to prepare an outline of a more comprehensive groundwater quality assessment program as required (320 IAC 4.1-20-4(a));
- j. Failure to comply with 320 IAC 4.1-20-4(b) through (d), statistically evaluating any changes in parameters in downgradient wells compared to those in the upgradient wells.
- k. Failure to keep records of the analyses required in 329 IAC 4.1-20-3(c) and (d) and 320 IAC 4.1-20-5, associated groundwater surface elevations, and the

statistical calculations and evaluations required in 320 IAC 4.1-20-4(b) throughout the active life of the facility (320 IAC 4.9-20-5(a)(1));

1. Failure to report specified groundwater monitoring information to the Technical Secretary and Regional Administrator as required by 320 IAC 4.1-20-5(a)(2) and 40 CFR 265.94(a)(2).
14. In a letter dated May 5, 1985, ISBH notified Respondent of violations of financial assurance requirements discovered during a records review on March 26, 1985. No hazardous waste facility certificates of liability insurance have been received at ISBH as required by 320 IAC 4.1-22-24(a) and (b). Respondent has not yet achieved compliance with these requirements.
15. An inspection performed by ISBH on June 17, 1985, found the following violations at Respondent's facility:
 - a. No general waste analyses were on file for hazardous wastes received, as required by 329 IAC 4.1-16-4(a).
 - b. No general waste analysis plan was on file, as required by 320 IAC 4.1-16-4(a).
 - c. No functional internal communications system was found (320 IAC 4.1-17-3(a)) nor were telephones or two-way radio systems immediately available to summon emergency assistance, as required by 320 IAC 4.1-17-3(b).
 - d. Functional emergency equipment was not found, as required by 320 IAC 4.1-17-3(c) and (d).
 - e. A contingency plan, as required by 320 IAC 4.1-18-2, was not found on file.
 - f. Apparent violations of the manifesting procedures found at 320 IAC 4.1-19-2(a)(1) and (5) were observed. Unmanifested wastes were accepted without filling out forms required at 320 IAC 4.1-19-7.
 - g. Records were not available indicating the description and quantity of waste received or the dates wastes were received and disposed of, as required by 320 IAC 4.1-19-4(b)(1).
 - h. Records were not available indicating disposal locations or quantities of each hazardous waste placed at those locations within the facility, as required by 320 IAC 4.1-19-4(b)(2).

- i. Inspection logs indicating dates, times and inspections were not kept, as required by 320 IAC 4.1-16-6(d).
 - j. Inspections of emergency equipment and security devices were not conducted, as required by 320 IAC 4.1-16-6(b)(1).
 - k. "Danger" signs were not posted, as required by 320 IAC 4.1-16-5(c).
16. On March 29, 1985, ISBH sent a letter to Respondent notifying the facility of lack of compliance with requirements as follows:
- a. No proof of financial assurance for closure/post-closure had been submitted, as required by 320 IAC 4.1-22-5 through 4.1-22-12 and 320 IAC 4.1-22-14 through 4.1-22-23.
 - b. No proof of liability coverage for sudden and non-sudden accidental occurrences had been submitted, as required by 320 IAC 4.1-22-24.
17. ISBH received an inadequate response from Respondent on April 16, 1985, regarding the deficiencies stated in Finding 16 above.

ORDER

Respondent having been initially determined to be in violation of Section 3004 and 3005 of RCRA and those portions of 320 IAC 4.1 specified above, the following Compliance Order pursuant to Section 3008(a)(1) of RCRA, 42 USC §6928(a)(1), is entered.

- A. Respondent shall, within thirty (30) days of this Order becoming final:
- 1. Prepare and submit a closure plan and post-closure plan to the Indiana Department of Environmental Management (IDEM), with a copy to Complainant, in accordance with 320 IAC 4.1-21 and 4.1-28 which will result in closure of the facility. These plans shall describe activities which will:
 - a. Minimize the need for further maintenance (320 IAC 4-21-2(a)); and
 - b. Control, minimize, or eliminate post-closure escape of hazardous waste or hazardous waste constituents to the environment (320 IAC 4.1-21-2(b)).

The plans must describe activities which will meet the requirements for landfill closure and post-closure care (320 IAC 4.1-28-4), indicate how they will be achieved, schedule the total time required to closure the facility (320 IAC 4.1-21-

3(a)(4)), and describe continued post-closure maintenance and monitoring for a minimum of thirty (30) years after the date of completing closure.

2. Submit to IDEM, with a copy to Complainant:

- a. A written cost estimate for closure of the facility in accordance with the closure plan, as required by 320 IAC 4.1-22-3(a);
- b. A written estimate of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations at 320 IAC 4.1-22-13(a);
- c. Evidence of financial assurance for both closure and post-closure care of the facility as specified at 320 IAC 4.1-22-4, 4.1-22-14 and 4.1-22-23;
- d. Evidence of financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operation of the facility, as required by 320 IAC 4.1-22-24(a); and
- e. Evidence of financial responsibility for bodily injury and property damage to third parties caused by non-sudden accidental occurrences arising from operation of the facility, a requirement stated at 320 IAC 4.1-22-24(b).

B. Respondent shall, within thirty (30) days of this Order becoming final, submit to U.S. EPA and IDEM for approval, a plan and implementation schedule (not to exceed 120 days) for a groundwater quality assessment program to be put into effect at Respondent's landfill. This program must be capable of determining whether any plume of contamination has entered the groundwater from the landfill, and if so, the rate and extent of migration and the concentrations of hazardous waste or hazardous waste constituents in the groundwater as stated at 320 IAC 4.1-20-4(a). the plan must specify:

- 1. Methodology which will be used to investigate site-specific geology and subsurface hydrology at Respondent's landfill in order to yield:
 - a. A determination of the thickness and a real extent of the uppermost aquifer at the site and any interconnections which may exist between it and lower aquifers;
 - b. Aquifer hydraulic properties determined from lithologic samples, slug tests, or pumping tests;

- c. A site water-table contour map from which groundwater flow direction and gradient can be determined; and
 - d. Identification of regional and local areas of recharge and discharge of groundwater.
2. Proposed location, depth, and construction specifications for each monitoring well. The proposed well system must consist of monitoring wells placed in the uppermost aquifer and in each underlying aquifer which is hydraulically interconnected such that:
- a. At least one background monitoring well is installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the waste management area. The number of wells, their locations, and depths must be sufficient to yield groundwater samples that are:
 - (i) Representative of background groundwater quality in the uppermost aquifer and all aquifers hydraulically interconnected beneath the landfill; and
 - (ii) Not affected by the landfill itself.
 - b. At least three monitoring wells are installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the waste management area. Their number, locations and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area.

Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well borehole. This casing must be screened or perforated and packed with gravel or sand where necessary to enable sample collection at depths where appropriate aquifer flow zones exist. The annular space (i.e., the space between the borehole and well casing) above the sampling depth must be sealed with a suitable material (e.g., cement grout or bentonite slurry) to prevent contamination of samples and the groundwater.

3. The hazardous wastes (defined at 320 IAC 4.1-3-3) and hazardous waste constituents (defined at 320 IAC 4.1-1-7 and listed at 320 IAC 4.1-5-5 and 4.1-6-8) which will be analyzed for in groundwater samples and the basis for selection of those specific constituents (e.g., information stated on

manifests of hazardous wastes accepted for disposal at Respondent's landfill, information available from general waste analyses kept at the landfill, etc.);

4. A sample collection plan that contains the following:
 - a. A detailed description of sample-collection procedures;
 - b. Recording of groundwater elevations at each sampling;
 - c. Written procedures for sample preservation and shipment of groundwater samples that address each constituent for which groundwater is being analyzed to ensure accurate laboratory results;
 - d. A written record and plan showing chain-of-custody control for samples from the time of collection until analyses are performed;
 - e. A written description of analytical procedures to be used by laboratories to analyze the groundwater samples; and
 - f. A written schedule for collection of samples.
 5. Procedures for evaluating analytical results to establish the presence or absence of any plume of contamination that may be found and schedules for reporting such results to U.S. EPA and IDEM.
- C. Respondent shall:
1. Implement the closure plan, after it has been approved by IDEM, as required by 320 IAC 4.1-21-4(a); and
 2. Implement the post-closure plan, as approved by IDEM.
- D. Respondent shall implement the groundwater quality assessment program, as approved by Complainant and IDEM, within 120 days of the approved date.
- E. Respondent shall, within fifteen (15) days after carrying out the plan for a groundwater quality assessment program, submit to the Technical Secretary of the IDEM and to the U.S. EPA a written report containing the results of the groundwater quality assessment.

- F. Respondent shall, within thirty (30) days of receipt of this Order, post "Danger" signs in accordance with 320 IAC 4.1-26-5(c).
- G. Respondent shall continue the current practice of not accepting hazardous waste for disposal.

The Respondent shall notify U.S. EPA in writing upon achieving compliance with this Order and any part thereof. This notification shall be submitted not later than forty-five (45) days after this Order becomes final to the U.S. EPA, Region V, RCRA Enforcement Section, 230 South Dearborn Street, Chicago, Illinois 60604.

Notwithstanding any other provision of this Order, an enforcement action may be brought pursuant to Section 7003 of RCRA, 42 USC §6973, or any other applicable statutory authority, should U.S. EPA find that the handling, storage, treatment, transportation, or disposal of solid hazardous waste at the facility may present an imminent and substantial endangerment to human health or the environment.

ASSESSMENT OF PENALTY

Based upon the violations cited herein, and pursuant to Section 3008(g) of RCRA, 42 USC §6928(g), U.S. EPA assesses a penalty of ONE HUNDRED SEVENTEEN THOUSAND DOLLARS (\$117,000) against the Respondent. The proposed penalty has been set at the indicated level based upon an analysis of the seriousness of the violations cited herein and the conduct of the Respondent. Payment shall be submitted within sixty (60) days of entry of this Order in the form of a certified or cashier's check made payable to the Treasury of the United States of America, and shall be remitted to U.S. EPA, P.O. Box 70753, Chicago, Illinois 60637. Copies of the transmittal of payment shall be sent to both the Regional Hearing Clerk, Planning and Management Division, and the Solid Waste and Emergency Response Branch Secretary, Office at Regional Counsel, U.S. EPA, 230 South Dearborn Street, Chicago, Illinois 60604.

Failure to comply with any requirement of the above Compliance Order shall submit Respondent to liability for a civil penalty of not more than \$25,000 per day for each day of such violation, as provided in Section 3008(c) of RCRA, 42 USC §6928(c).

NOTICE OF OPPORTUNITY FOR HEARING

The above-named Respondent has the right to request a hearing to contest any material factual allegation set forth in the Complaint and Compliance Order or the appropriateness of any proposed compliance schedule or penalty. Unless said Respondent has requested a hearing in writing not later than thirty (30) days from the date this Complaint is served, Respondent may be found in default of the above Complaint and Compliance Order.

To avoid a finding of default by the Regional Administrator, you must file a written answer to this Complaint with the Regional Hearing Clerk, Planning and Management Division, U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois 60604, within thirty (30) days of your receipt of this notice. A copy of your answer and any subsequent documents filed in this action should also be sent to Marc M. Radell, Assistant Regional Counsel, at the same address. Failure to answer within thirty (30) days of receipt of this Complaint may result in a finding by the Regional Administrator that the entire amount of penalty sought in the Complaint is due and payable and subject to the interest and penalty provisions contained in the Federal Claims Collection act of 1966, 31 U.S.C. §§3701 et seq.

Your answer should clearly and directly admit, deny, or explain each of the factual allegations of which you have knowledge. Said answer should contain: (1) a definite statement of the facts which constitute the grounds of defense, and (2) a concise statement of the facts which you intend to place at issue. The denial of any material fact or the raising of any affirmative defense shall be construed as a request for a hearing.

The Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation of Suspension of Permit, 40 CFR Part 22, are applicable to this administrative action. A copy of these Rules is enclosed with this Complaint.

SETTLEMENT CONFERENCE

Whether or not you request a hearing, you may confer informally with U.S. EPA concerning (1) whether the alleged violations in fact occurred as set forth above; (2) the appropriateness of the compliance schedule; and (3) the appropriateness of any penalty assessment in relation to the size of your business, the gravity of the violations, and the effect of the penalty on your ability to continue in business.

You may request an informal settlement conference at any time by contacting Mr. Jonathan Cooper at telephone number (312) 886-4464; however, any such request will not effect the 30-day time limit for responding with an answer to this Complaint and Compliance Order. U.S. EPA encourages all parties to pursue the possibilities of settlement through informal conferences.

DATED this 30th day of May, 1986

Basil G. Constantelos, Director
Waste Management Division
Complainant
U.S. Environmental Protection Agency
Region V

CERTIFICATE OF SERVICE

I hereby certify that I have caused copies of the foregoing Complaint and Compliance Order to be served upon the persons designated below on the date below, by causing said copies to be deposited in the U.S. Mail, First Class and certified return receipt requested, postage prepaid, at Chicago, Illinois in envelopes addressed to:

CT Corporation System, Registered Agent for
Gary Development Company, Inc.
1 North Capitol Avenue
Indianapolis, Indiana 46204

Mr. Larry Hagen, Vice President
Gary Development Company, Inc.
479 North Cline Avenue
Gary, Indiana 46406

I have further caused the original of the Complaint and Compliance Order, and this Certificate of Service to be served in the office of the Regional Hearing Clerk located in the Planning and Management Division, U.S. EPA, Region V at 230 South Dearborn Street, Chicago, Illinois 60604, on the date below.

These are said persons' last address known to the subscriber.

Dated this 30th day of May 1986.

Jean Sharp, for
Secretary, Hazardous Waste Enforcement Branch

June 5, 1986

A file memorandum was issued by Mr. Schafer regarding an administrative hearing conducted on the GDC Landfill. Mr. Schafer noted, among other things, that his testimony reviewed more recent violations of not applying a clay-type soil for daily cover, and stockpiling demolition wastes, "grinding fluff," and foundry sand instead of applying cover to these wastes. Mr. Hagen testified, according to Mr. Schafer, that GDC applies a daily cover with a mixture of clay and foundry sand and "grinding fluff" is used for traction material. He also testified that they do pump stormwater into the Grand Calumet River. Mr. Schafer noted that two questions were brought up during the hearing: (1) could the water on-site be classified as leachate without analytical testing, and (2) was the amount of clay in the cover material measured.

June 18, 1986

Mr. Cleaton attempted to conduct an inspection of the GDC Landfill at 9:15am. Mr. Cleaton was informed that Mr. Hagen was not at work yet. Mr. Cleaton informed the scale manager that he was rather upset that Mr. Hagen could not keep his appointments and would be referring this matter to the EPA. Mr. Cleaton noted that he would be retiring on July 14, 1986.

July 29, 1986

Mr. Warner issued a memorandum to the GDC file. [*Find this memorandum.*]

August 22, 1986

Mr. Warner attempted to conduct an inspection of the GDC Landfill. Mr. Hagen was not present, but, according to the gate operator, was expected later in the day. Mr. Warner telephoned Mr. Hagen later the same day and was informed that nothing had changed at the GDC Landfill from the date of the last inspection. Furthermore, Mr. Hagen stated that he had not attempted to meet any applicable RCRA or 321 IAC 4.1 regulation. However, Mr. Hagen did reveal that he had engaged in discussions with EPA representatives in an attempt to resolve the matter.

September 20, 1986

Judge Garrettson issued his Recommended Findings, Conclusion, and an Order for the matter between GDC and IDEM in Cause No. N-146.

October 20, 1986

A letter was issued to Mr. Hagen from Mr. Miller requesting that his monthly Special Waste Reports be sent to the Indiana Department of Environmental Management ("IDEM"), rather than the ISBH.

April 20, 1987

A Preliminary Review Report was completed by Ms. Cindy Deal as a part of the RCRA Facility Assessment for the GDC Landfill.

May 19, 1987

A letter was issued to Mr. Hagen from Mr. Miller regarding Mr. Hagen's verbal request to utilize wastewater treatment sludge or sludge-type products for soil conditioners. The letter noted that the Land Application Branch of the Office of Water Management would need to approve of such use before any application could occur.

June 15, 1987

An inspection of the GDC Landfill was conducted by Mr. Leith in order to determine its current elevations, remaining fill area, and remaining borrow area. Mr. Leith noted that the north central portion of the GDC Landfill was close to the previously approved final contours with no significant overfilling. The remaining fill area was noted as approximately eight and one-half (8.5) acres in the center of the GDC Landfill. Mr. Leith observed a small area at the extreme

north central part of the GDC Landfill that could be filled by constructing a clay wall to control leachate.

The remaining fill volume was estimated to be five hundred and eighty thousand five hundred and fifty-five (580,555) cubic yards, which could retain four hundred and sixty-four thousand four hundred and forty-four (464,444) cubic yards of solid waste, if twenty (20) percent of the volume is taken up by daily cover.

Numerous large leachate seeps were observed draining into the low areas in the central and north central parts of the GDC Landfill. Some of the consolidated ash previously landfilled in the eastern portion of the GDC Landfill had been recently excavated and appeared to have been used as daily cover or for purposes of improving the mobility of equipment across the solid waste.

August 27, 1987

An inspection of the GDC Landfill was conducted by Mr. Warner and Mr. Jonathon Cooper, Geologist, U.S. EPA Region V. Mr. Hagen and Mr. Terry R. West, Ph.D., P.E., GDC's engineering and geological consultant, represented GDC during the inspection. During this particular inspection, Mr. Hagen informed Mr. Warner that the only "waste shipments" transported to the GDC Landfill were the shipments from ACS, manifested as F005. However, Mr. Hagen argued that those shipments were not hazardous waste, per Mr. James Tarpo, President of ACS. Additionally, Mr. Hagen changed his story regarding the broken battery cases and neutralized calcium sulfate sludge from U.S.S. Lead. He informed Mr. Warner that such waste was never transported to the GDC Landfill. [See June 17, 1985 entry.]

September 9, 10 & 11, 1987

A formal hearing was held regarding EPA's Complaint and Compliance Order, Cause No. V-W-86-R-45.

September 15, 1987

Mr. Hagen informed Mr. Dean J. Nygard of the Site Investigation Section, Office of Environmental Response, IDEM, that he did not have the authority to conduct the Visual Site Inspection component of the RCRA Facility Assessment. Mr. Hagen stated that he was acting on the advice of his attorney, Mr. Krebs.

March 17, 1988

A Landfill Erosion and Sedimentation Review Worksheet was compiled by Mr. Ed Carns, Supervisor, Lake County Soil & Water Conservation District, for the GDC Landfill. Accompanying Mr. Carns were Mr. Larry Olsterholz, Non-Ag Erosion Control Specialist; Mr.

Roger Nanney, District Conservationist, Soil Conservation Service; and Mr. Schafer. The Worksheet noted areas of erosion, but not off-site sedimentation.

April 28, 1988

Mr. Warner inspected the GDC Landfill.

November 15, 1988

A Landfill Erosion and Sedimentation Review Worksheet was compiled by Mr. Harry Molchan, Supervisor, Lake County Soil & Water Conservation District, for the GDC Landfill. Accompanying Mr. Molchan were Messrs. Olsterholz, Nanney, and Schafer. The Worksheet noted areas of erosion and off-site sedimentation.

December 2, 1988

A letter was issued to Mr. Hagen from Mr. Palin stating that new solid waste regulations would be coming into effect on December 10, 1988. Further, the letter noted that existing solid waste landfills were being evaluated for their acceptability as certified special waste landfills. The letter stated that, pursuant to 329 IAC 2-21-3(d), GDC was being notified that it was not authorized to accept unlimited quantities of special waste pursuant to 329 IAC 2-21-13. Any approvals, therefore, would need to be approved by the Commissioner on a case-by-case basis.

May 13, 1989

A fire at the GDC Landfill was reported by Mr. Novak to Mr. Schafer at 2:30pm. Allegedly, the fire occurred when residue from the East Chicago Sanitary District grinder caught fire. This residue was being used as daily cover at the GDC Landfill. Mr. Schafer and Mr. Rick Reynolds, Office of Air Management, responded to the fire.

May 18, 1989

A Landfill Erosion and Sedimentation Review Worksheet was compiled by Mr. Molchan for the GDC Landfill. Accompanying Mr. Molchan were Messrs. Olsterholz, Nanney, and Schafer. The Worksheet noted areas of erosion and off-site sedimentation.

June 31, 1989

The GDC Landfill ceased operation.

August 29, 1989

A letter was issued to Commissioner Kathy Prosser and Mr. Palin from Mr. Krebs regarding a variance from the new solid waste regulations (329 IAC 2) adopted in August of 1988. Specifically, GDC wanted a variance from 329 IAC 2, including, but not limited to, the closure and post-closure provisions (329 IAC 2-12-1, 2-12-3, 2-14, 2-15-1-8, and 2-25-2) to allow the GDC Landfill to continue to accept solid waste for disposal in the unfilled area only under the regulations existing prior to September 1, 1988. GDC requested the variance for one (1) year, per IC 13-7-7-6.

The letter also noted that the GDC Landfill was operating under the conditions of Agreed Order, Cause No. N-53, as adopted on February 28, 1983 by the EMB. This settlement had allowed GDC's construction and operating permit to each last for a period of two (2) years from the effective date of March 1, 1983. GDC noted that it had filed an application for the renewal of its operating permit before March 1, 1985, but had not received any notification from IDEM regarding its acceptance nor denial.

October 19, 1989

A letter was issued to Mr. Hagen from Ms. Schmidt regarding an adequate groundwater monitoring system at the GDC Landfill. Mr. Hagen had previously called Mr. Gefell on September 11, 1989 to inquire about this information. The letter enclosed a copy of EPA's Technical Enforcement Guidance Document ("TEGD") and also noted that IDEM required no less than one (1) upgradient well and three (3) downgradient wells for RCRA solid and hazardous waste facilities.

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STATE OF INDIANA)	BEFORE THE INDIANA DEPARTMENT OF
) SS:	ENVIRONMENTAL MANAGEMENT AND
COUNTY OF MARION)	INDIANA SOLID WASTE MANAGEMENT
		BOARD

IN RE:)	
)	
GARY DEVELOPMENT COMPANY,)	CAUSE NO. _____
INC.'s PETITION FOR VARIANCE)	
UNDER I.C. 13-7-7-6.)	

REQUEST FOR HEARING

The Petitioner Gary Development Company, Inc., by counsel, hereby requests a hearing on its Petition for Variance, stating as follows:

1. On August 29, 1989, Gary filed with the Commissioner's Office of the IDEM a Petition for Variance from the new Indiana Solid Waste Regulations adopted originally in August 1988 (329 IAC 2), including, but not limited to, the closure and post-closure provisions (329 IAC 2-12-1, 2-12-3, 2-14, 2-15-1-8 and 2-25-2), and to allow Gary to continue to accept for one year non-hazardous solid waste for landfill disposal in an unfilled area under the regulations existing prior to September 1, 1988.
2. On August 29, 1989, Gary notified the IDEM's Commissioner that it was suspending the acceptance of solid waste for landfilling effective August 31, 1989, even though landfilling capacity with an estimated longevity of less than twelve months remained.
3. The remaining fill area had been under dispute and was addressed in an Indiana Environmental Management Board Settlement Agreement in Cause No. N-53 approved on February 28, 1983.
4. On September 30, 1986, the Presiding Officer for the IEMB concluded after conducting an evidentiary hearing in Cause No. N-146 that Gary had submitted the necessary soil borings from its west wall. These are required by the 1983 Settlement Agreement to determine whether the wall complied with the specifications agreed to in paragraph 7(b) of the Settlement Agreement. Thus, pursuant to Section 7(d) of the Settlement Agreement, Gary may construct "further portions of the clay perimeter wall around the site."
5. The reasons supporting the variance from the new SWMB regulations include that:
 - (a) Filling the remaining area with municipal solid waste to the elevation approved in the construction permit and to a contour appropriate and consistent with the surrounding areas would be environmentally beneficial, and
 - (b) Applying the new regulations would create an undue hardship because of the very short remaining life of the facility.

WHEREFORE, Gary Development Company, Inc., by counsel, requests a hearing on its Petition for Variance made pursuant to I.C. 13-7-7-6.

PARR, RICHEY, OBREMSKEY & MORTON

Attorneys for Petitioner, Gary
Development Company, Inc.

By _____
Warren D. Krebs

November 9, 1989

A memorandum was issued to Mr. Tom Newby, Office of Legal Counsel, from Mr. Gefell regarding GDC's request for a variance to the new post-closure regulations. [See August 29, 1989 entry.] Mr. Gefell believed that the GDC Landfill would need to comply with a number of minimum hydrogeological requirements before being granted any variance. A portion of Mr. Gefell's comments are noted, verbatim, below:

1. *They [GDC] must secure a source of capping material that meets IDEM hydraulic (recompacted) and compaction property requirements and provide proof of money set aside to complete the capping, contouring, and drainage.*
2. *GDC must install a groundwater monitoring well system (mws) that meets IDEM installation specifications and adequately defines groundwater contamination by said facility. According to 329 IAC 2-16-1, all existing sanitary landfills must have a monitoring well system that meets the requirements of the Commissioner on or before [September 1, 1989]. We would advise the Commissioner that the minimum four [4] wells (one [1] upgradient and three [3] downgradient) could not adequately define groundwater contamination by the 62 acre GDC Landfill. This site needs more than the minimum number of wells because of the size of the source area (62 acres) and the compounded problem of radial groundwater flow probably emanating and dispersing contaminants in all directions from the mounded landfill. This site needs a **minimum** (and we stress minimum) of ten [10] monitoring locations; nine [9] with nested two-well clusters and one [1] groundwater table piezometer. Each cluster would have a shallow screened well to detect 'floaters' contaminants on the groundwater table and a deeper screened well to detect 'sinkers' in the uppermost aquifer, in this case the upper 30 to 40 feet of surficial sandy beach and dune soil. A minimum of seven [7] of these well clusters should be around the mounded landfill, concentrating on the southern flanks close to the Grand Calumet River. Two [2] clusters would be positioned upgradient from the landfill (presumably north but must be accurately determined by GDC before wells are installed), in a line perpendicular to the direction of groundwater flow (probably north to south, but must be determined by GDC). These clusters should be set several hundred feet apart beyond the zone of groundwater contamination from the GDC Landfill (greater than 600 ft if possible). The upgradient wells will be located on off-site property, probably along the Indiana Toll Road Connector or other State property. Mr. John Crist of the Indiana Toll Road said it was likely the wells could be located along the Connector right-of-way. Groundwater samples from these upgradient wells should adequately characterize the 'background' water chemistry. The*

groundwater table piezometer would form a triangle with the two [2] upgradient clusters to keep track of flow direction variations. The piezometer is not a sampling well.

GDC would be skirting the required hydrogeologic study and groundwater assessment because of time and money restrictions. Consequently, for these and other pre-eminent reasons, we cannot guarantee that ten [10] wells would be adequate but we can say that it would be very difficult for GDC to prove to us that anything less is adequate. However, depending on their financial status, we may bargain for two [2] upgradient well clusters and five [5] clusters around the mounded landfill.

December 14, 1989

A Landfill Erosion and Sedimentation Review Worksheet was compiled by Mr. Molchan for the GDC Landfill. Accompanying Mr. Molchan were Messrs. Nanney and Schafer. The Worksheet noted areas of erosion and off-site sedimentation. The Worksheet was issued to Mr. Hagen by Mr. Olsterholz.

January 23, 1990

An inspection of the GDC Landfill was conducted at 12:00pm by Mr. Schafer. Mr. Schafer noted three (3) violations, including faulty daily cover (329 IAC 2-14-12), lack of final cover (329 IAC 2-14-19), and on-site leachate (329 IAC 2-14-21).

February 20, 1990

An inspection of the GDC Landfill was conducted at 10:25am by Mr. Schafer. Mr. Schafer noted three (3) violations, including faulty daily cover (329 IAC 2-14-12), lack of final cover (329 IAC 2-14-19), and on-site leachate (329 IAC 2-14-21).

April 2, 1990

An inspection of the GDC Landfill was conducted at 12:45am by Messrs. Schafer and Miller. Mr. Schafer noted four (4) violations, including faulty daily cover (329 IAC 2-14-12), lack of final cover (329 IAC 2-14-19), on-site leachate (329 IAC 2-14-21), and poor grading and stabilization (329 IAC 2-14-18).

May 24, 1990

Four (4) water samples were obtained from the monitoring wells at the GDC Landfill.

June 8, 1990

Mr. Warner conducted an inspection of the GDC Landfill. Mr. Hagen was not present during the inspection. Mr. Warner was able to speak with Mr. Hagen via telephone after the inspection. He stated that he was buying clay and initiating the construction of a cap for the landfill. Also, Mr. Hagen noted that a lien was placed on the property due to nonpayment for the clay.

August 1, 1990

A complaint inspection of the GDC Landfill was performed at 6:30pm by Mr. Michael Kuss, Office of Water Management. Mr. Kuss noted that the GDC Landfill was rated as unacceptable. Water was observed being pumped from a large pond located on the far north side of the via a flexible hose into a spillway leading to the Grand Calumet River. Mr. Bud Martin, the GDC Landfill night watchman, appeared to answer Mr. Kuss' questions in an evasive manner and also managed to turn off the pump that was transferring water from the large pond into the Grand Calumet River. *[Find this inspection report.]*

Three (3) water samples were obtained from the monitoring wells at the GDC Landfill.

October 18, 1990

The following is a copy of Emergency Order, Cause No. B-1357, signed by Commissioner Kathy Prosser on October 16, 1990, and issued to GDC on October 18, 1990. This Emergency Order was based upon an inspection of the GDC Landfill on August 1, 1990, by Office of Water Management inspector Mr. Michael Kuss.

STATE OF INDIANA)		BEFORE THE INDIANA DEPARTMENT
)	SS:	OF ENVIRONMENTAL MANAGEMENT
COUNTY OF MARION)		
COMMISSIONER OF THE DEPARTMENT)		
OF ENVIRONMENTAL MANAGEMENT,)		
)		
Complainant,)		
)		CAUSE NO. B-1357
v.)		
)		
GARY DEVELOPMENT COMPANY, INC.,)		
)		
Respondent.)		

EMERGENCY ORDER OF THE COMMISSIONER

TO: Mr. William M. Nanini, President
Gary Development Company, Inc.
2727 West Club Drive
Tuscon, Arizona 87541

C.T. Corporation, Resident Agent
Gary Development Company, Inc.
1 North Capitol
Indianapolis, Indiana 46204

Follows is the Emergency Order of the Commissioner of the Department of Environmental Management issued against Gary Development Company, Inc. for violation of the Water Pollution Control Act. This Emergency Order is issued pursuant to IC 13-7 and IC 4-21.5-4 and is based on an investigation which revealed a threat to the environment and potential health condition. During this investigation, it was determined that Gary Development Company, Inc. was in violation of 327 IAC 5. This rule states, in part, that a point source discharge of pollutants to waters of the State without a valid NPDES Permit is prohibited. Such a discharge is also a violation of IC 13-1-3, and the Environmental Management Act (IC 13-7).

I. FINDINGS OF FACT

1. Complainant is the Commissioner of the Indiana Department of Environmental Management (also referred to as Commissioner).
2. Complainant has jurisdiction over the Respondent and the subject matter of this action.
3. Respondent, Gary Development Company, Inc. owns a sanitary landfill located in Gary, Indiana.
4. Complainant conducted an inspection of Respondent's facility on August 1, 1990. The inspection revealed that Respondent was discharging leachate water from their facility to receiving waters named the Grand Calumet River.
5. Respondent does not have an NPDES Permit that authorizes point source discharges from the above named facility.
6. Complainant alleges that as a result of untreated leachate flowing from Respondent's sanitary landfill, a threat to the aquatic environment of the Grand Calumet River and human health exists.

II. ORDER

WHEREFORE, it is now ORDERED that upon receipt of this Emergency Order, Respondent shall:

1. Respondent shall immediately cease the discharge of leachate into waters of the State.
2. Respondent shall apply for an NPDES Permit within sixty (60) days of the effective date of this Order.
3. This Emergency Order is effective upon issuance, except that:
 - a. A party affected by this Emergency Order may request a hearing under IC 4-21.5-4-4 by submitting a written request to the Commissioner at the aforementioned address.
 - b. Upon a request by a party for a hearing, the agency shall, as quickly as practicable, set the matter for an evidentiary hearing and an administrative law judge shall determine whether this Emergency Order should be voided, terminated, modified, stayed, or continued.
 - c. This Emergency Order expires ninety (90) days from the date of issuance and is subject to renewal under IC 4-21.5-4-5.

Dated at Indianapolis, Indiana, this 16th day of October.

November 9, 1990

Three (3) samples were obtained from the monitoring wells at the GDC Landfill.

December 13, 1990

An inspection of the GDC Landfill was conducted at 1:30pm by Mr. Schafer. Mr. Schafer noted three (3) violations, including faulty daily cover (329 IAC 2-14-12), lack of final cover (329 IAC 2-14-19), and on-site leachate (329 IAC 2-14-21). Mr. Schafer noted that the entrance road had been cut for the purpose of installing a culvert, thus allowing the water ponded between the GDC Landfill and Vulcan to be drained, presumably, into the Grand Calumet River.

January 22, 1991

A subpoena was issued to Mr. Palin from Judge Anita W. Ruppert to appear and testify on January 29, 1991 at 11:00am regarding the Emergency Order, Cause No. B-1357 (90-W-J-428), issued to GDC on October 18, 1990.

March 7, 1991

An inspection was conducted at the GDC Landfill.

April 16, 1991

A follow-up inspection of the GDC Landfill was performed by Mr. Kuss. [*Find more information on this inspection.*]

April 26, 1991

**NOTICE OF FILING OF RECOMMENDED FINDINGS OF FACT/CONCLUSIONS
OF LAW AND ORDER OF THE ADMINISTRATIVE LAW JUDGE**

You are hereby notified that on the 26 day of April, 1991, I, as Presiding Officer in the above cause, have presented to and have filed with the Technical Secretary of the Water Pollution Control Board the complete record of the proceedings heretofore held before me on the above cause including Recommended Findings of Fact and Conclusions of Law, other than the transcript of the oral testimony, together with my Recommended Order.

A copy of said Recommended Findings of Fact and Conclusions of Law and Recommended Order is enclosed and made a part of this notice.

You are further notified, as provided by IC 4-21.5-3-29(d)(2) that any interested and affected person may, within fifteen (15) days after receipt of notice file with the Technical Secretary of the Water Pollution Control Board, 5th Floor, Department of Environmental Management, 105 South Meridian Street, Indianapolis, Indiana 46225, objections to the entry of such Order.

Copies of such objections shall also be filed with the Presiding Officer and with all other parties or counsel of record.

If objections are filed, responsive pleadings shall be filed with the Technical Secretary by all other parties within ten (10) days of receipt of objections, with copies to the Presiding Officer and with all other parties or counsel of record.

Dated at Indianapolis, Indiana, this 26 day of April, 1991.

May 13, 1991

**IDEM's OBJECTIONS TO THE RECOMMENDED FINDINGS OF FACT,
CONCLUSIONS OF LAW AND ORDER OF THE ADMINISTRATIVE LAW JUDGE**

Comes now the Complainant, by counsel, and objects to the following RECOMMENDED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER OF THE ADMINISTRATIVE LAW JUDGE filed in this cause on April 26, 1991:

1. Findings of Fact numbered 26 where the Administrative Law Judge (ALJ) found that the report of soil borings performed by ATEC Associates demonstrated the permeability to be within required parameters.
2. Conclusion of Law numbered 1 to the extent that the ALJ found that Respondent invoked the jurisdiction of the Solid Waste Management Board in this proceeding.
3. Conclusion of Law numbered 6.
4. Conclusion of Law numbered 8 where the ALJ found that the soil boring report submitted by Respondent in 1985 demonstrate an acceptable level of impermeability according to the terms of the Agreed Order in Cause No. N-52.
5. Conclusion of Law numbered 9 where the ALJ found that Respondent is entitled to a hearing on its Petition for Variance.
6. Order numbered 3 where the ALJ found that Respondent may at any time commence construction of the remaining portion of the clay perimeter in accordance with the terms of the Agreed Order in Cause No. N-53.
7. Order numbered 4 where the ALJ granted Respondent's request for a hearing and assigned the matter as Cause No. 91-S-J-488 entitled "In the Matter of: Request for Variance from Closure and Post-Closure Rules, Gary Development Company, Inc."

Each Finding of Fact, Conclusion of Law, or Order challenged above violates one or more of the following legal requirements in that it is:

- (A) Arbitrary, capricious, an abuse of discretion, or contrary to law;
- (B) Contrary to constitutional right, power, privilege, and immunity;
- (C) In excess of statutory jurisdiction, authority, or limitations;
- (D) Without observance of procedure required by law; or
- (E) Unsupported by substantial evidence.

WHEREFORE, Complainant requests the Water Pollution Control Board to modify the Recommended Findings of Fact, Conclusions of Law and Order of the Administrative Law Judge by deleting therefrom those paragraphs which have been set forth and challenged above.

Respectfully submitted:

CERTIFICATE OF SERVICE

I hereby certify that a copy of these objections was served upon Counsel for the Respondent by U.S. first class mail this 13th day of May 1991, addressed as follows:

Warren D. Krebs, Esq.
1600 Market Tower
Ten West Market Street
Indianapolis, IN 46204-2970

A copy of these objections has also been served upon each of the following offices within IDEM: Office of Hearings; Office of Water Management; and Office of Solid and Hazardous Waste Management.

October XX, 1991

PETITION FOR HEARING
ON ISSUANCE OF EMERGENCY ORDER

The Respondent Gary Development Company, Inc. (hereinafter called "GDC"), pursuant to Indiana Code 13-7-12-1(d) petitions for and requests a hearing under Indiana Code 4-21.5-4-4 regarding the Commissioner's Emergency Order with dates of October 16 and October 18, 1990. GDC's appeal includes, but is not limited to, contesting the following issues in the Emergency Order:

1. The Complainant did not observe leachate discharging from GDC's facility into the Grand Calumet River on August 1, 1990.
2. Any surface water alleged to be discharging from GDC's facility does not constitute a "point source discharge of pollutants to waters of the state."
3. The surface waters on GDC's site do not constitute leachate, and the Complainant on August 1, 1990, never collected and analyzed surface waters to determine whether such on-site water contained materials removed from solid waste necessary to classify it as "leachate."
4. Complainant on August 1, 1990, did not sample and analyze the water of the State of Indiana known as the Grand Calumet River near GDC's facility, and thus, there exists no threat of pollution in the mixing zone to the aquatic environment of the Grand Calumet River or to human health.

WHEREFORE, the Respondent Gary Development Company, Inc., petitions for a hearing regarding the Emergency Order of the Commissioner and regarding all issues raised in this Petition, and requests that the Emergency Order be voided.

December XX, 1991

RECOMMENDED FINDINGS OF FACT, CONCLUSION OF LAW
AND OTHER OF THE ADMINISTRATIVE LAW JUDGE

1. The Commissioner of the Indiana Department of Environmental Management (IDEM) is the Complainant in this cause and has jurisdiction over the Respondent and the subject matter of this _____ also has the legal authority to issue emergency _____.
2. The Respondent is Gary Development _____ (Gary) and owns a sanitary landfill located in Gary, Indiana.
3. On August 1, 1990, an inspector with the _____ conducted an on-site investigation of Gary's landfill property in _____ allegations that water was being discharged from the landfill property _____ and Calumet River.
4. IDEM's inspector observed a 2-5 acre pond _____ far north side of Gary's property whose elevations was approximately _____ feet below that of the landfill.
5. A watchman employed by Gary advised _____ that recent heavy rains had made it necessary to discharge _____ water _____ to bring in truckloads of clay in order to prevent _____ of the landfill from the washing away of topsoil.
6. IDEM's inspector heard a pump running and observed water being pumped from the pond via a flexible hose which ran south into a 4" PVC pipe which was buried for most of its length. The PVC pipe emptied into a spillway which allowed the water to flow to a small ditch along railroad tracks and the ditch in turn entered the Grand Calumet River.
7. Gary's watchman refused to provide any further details about the discharge and ran to turn off the pump while IDEM's inspector followed the discharge line the other way.
8. As the pump was being shut off, the flow of water from the discharge end of the pipe was reduced to a trickle and the inspector observed a large volume of ponded

water just below the end of the discharge pipe and a burned out area of vegetation further on towards the ditch.

9. The inspector did not take any samples of either the pond or the discharged water and none have since been taken.
10. Gary does not have a NPDES permit for discharging into the Grand Calumet River.
11. On October 1, 1990, the IDEM issued an Emergency Order of the Commissioner (Order) to Gary based, in whole, on the August 1, 1990 inspection report.
12. The Order alleged that Gary was discharging leachate water from their facility to the Grand Calumet River without the benefit of a NPDES permit.
13. The Order also alleges that the discharge of untreated leachate threatens the aquatic environment of the Grand Calumet River and human health.
14. As a result of IDEM's findings, Gary was ordered to immediately cease the discharge of leachate into state waters and to apply for a NPDES permit within sixty (60) days of the Order.
15. Gary timely filed its appeal of the Order, thereby initiating this action.
16. On April 14, 1980, Gary entered into an Agreed Order in Cause No B-406, which the Stream Pollution Control Board approved on May 20, 1980. The Agreed Order required Gary to cease discharge of water from its landfill to the Grand Calumet River or other waters of the state except in conformity with a NPDES permit.
17. The April 14, 1980, Agreed Order operated as a provisional operating permit and required Gary to apply for a renewal no later than ninety (90) days prior to the expiration date of the Agreed Order.
18. The Indiana Environmental Management Board (IEMB) received Gary's application for renewal on November 17, 1980. On February 16, 1982, IEMB granted Gary a renewal of Operating Permit No. 45-2, with nine conditions attached. Condition No. 5 prohibited Gary from discharging water from the site to the Grand Calumet River or other waters for the state, except in conformity with an approved NPDES permit.
19. Gary filed a petition for hearing, contesting the imposition of the nine conditions, including Condition No. 5.

20. Thereafter, Gary and IEMB reached a settlement on Gary's appeal under Cause No. N-53, and their Settlement Agreement and Recommended Agreed Order was approved and adopted by the Indiana Environmental Management Board on February 18, 1983.
21. Paragraph No. 3 of the Agreed Order deleted in its entirety the contested Condition No. 5, thereby eliminating the requirement for a NPDES permit.
22. The Agreed Order in Cause No. N-53 provided that Gary's operating permit should last for a period of two (2) years from its effective date of March 1, 1983.
23. Prior to the end of this period, Gary submitted an application for renewal of its operating permit, but no decision has been issued thereon.
24. The 2-5 acre pond from which water was being discharged on August 1, 1990, is located in a portion of the landfill which remains unfilled and below the approved site elevation.
25. This northern section remains unfilled because under the terms of the Agreed Order in Cause No. N-53, Gary, prior to filling it, was required to take four (4) soil borings from the site's west wall. If these test results showed the permeability of the clay wall to be 5.0×10^{-6} centimeters per second or less, then construction of the remaining portion of the clay perimeter walls could proceed and filling commence.
26. In November 1985, Gary submitted to IDEM a report of soil borings performed by ATEC Associates, the results of which demonstrated the permeability to be within the parameters of the Agreed Order. However, IDEM has not yet responded to the submission of this report.
27. The difference in the elevations of Gary's filled and unfilled sites contributes significantly to the ponding of water in the unfilled area.
28. On August 29, 1989, Gary filed with the IDEM a Notice of Suspending Operations and a Petition for Variance under IC 13-7-7-6. The notice also advised the IDEM of its failure to respond to both the 1985 soil boring results and the 1985 permit renewal application. In addition, Gary informed IDEM of the continued existence of the unfilled area which remains below the approved site elevation.
29. On December 11, 1989, Gary filed a Request for Hearing on its Petition for Variance. As with the soil boring report and operating permit renewal application, IDEM has never ruled on Gary's request for a hearing.

CONCLUSIONS OF LAW

1. Gary has invoked the jurisdiction of the Solid Waste Management Board, as well as the Water Pollution Control Board, through its affirmative defenses raised in this proceeding.
2. The February 18, 1983, Agreed Order in Cause No. N-53 is still in effect due to IDEM's failure to rule on Gary's operating permit renewal application.
3. 327 IAC 5-2-2 requires a NPDES permit for "...any discharge of pollutants into water of the state as a point source discharge..."
4. There is not sufficient evidence to support IDEM's contention that the water discharge contained leachate.
5. However, the proximity of the pond to land-filled areas, plus the burned-out vegetation near the mouth of the pipe, supports the inference that the discharge water contains one or more pollutants.
6. Since the terms of the Agreed Order under Cause No. N-53 explicitly deleted the requirement for a NPDES permit, no chemical analysis or other observations sufficiently support IDEM's conclusion that the discharged water contained leachate, the IDEM has unreasonably delayed ruling on Gary's operating permit renewal application, the Emergency Order dated October 18, 1990, was not an appropriate vehicle for resolution of the discharge problem.
7. Nonetheless, there is sufficient evidence to support IDEM's position that Gary must obtain an NPDES permit for its point source discharge.
8. The soil boring report submitted by Gary in 1985 demonstrates an acceptable level of impermeability according to the terms contained in the Cause No. N-53 Agreed Order.
9. Gary is entitled to a hearing on its Petition for Variance, as it previously requested on December 11, 1989.

ORDER

1. Gary shall immediately cease discharging any water off-site until it obtains a valid NPDES permit.

2. IDEM shall rule on Gary's NPDES application within sixty (60) days of receiving it.
3. Gary may at any time commence construction of the remaining portion of the clay perimeter in accordance with the terms of the Agreed Order in Cause No. N-53.
4. Gary's Request for Hearing submitted on December 11, 1989, is granted, the same having been assigned Cause No. 91-S-J-488 and entitled "In the Matter of: Request for Variance From Closure and Post-Closure Rules, Gary Development Company, Inc." Anita W. Ruppert shall be the Presiding Administrative Law Judge assigned to said cause.

December 17, 1991

A file memorandum was issued by Mr. John P. Naddy, Site Investigation Section, Office of Environmental Response regarding a review of the Focused Site Inspection Prioritization Review conducted by Ecology & Environment, Inc. Mr. Naddy recommended that the site merits further remedial action and suggested a low priority site inspection.

February 4, 1992

Mr. Thomas W. Mateer, Acting Chief, Superfund Program Management Branch, EPA Region V, issued CERCLA 104(e) and RCRA 3007 Request for Information Letters to the following entities:

- | | | | |
|----|------------------------------|------------------------|-------------------------------|
| 1. | Mr. Franks, Inc. | 201 West 155th Street | South Holland, Illinois 60473 |
| 2. | Strand Trucking, Inc. | 13642 Kenton | Crestwood, Illinois 60445 |
| 3. | CWM of Indiana | 4636 Adams Center Road | Fort Wayne, Indiana 46806 |
| 4. | Ashland Chemical | 6428 Joliet Road | Countryside, Illinois 60525 |
| 5. | Kankakee Industrial Disposal | 1360-90 East Locust | Kankakee, Illinois 60901 |
| 6. | Rozema Industrial Wastes | 2900 Peachridge | Walfer, Michigan 49504 |
| 7. | ABC Services, Inc. | 5910 49th Street | Kenosha, Wisconsin 53142 |

February 18, 1992

An inspection was conducted at the GDC Landfill by Messrs. Jack Brunner and Rick Hersemann and Ms. Judy Wagner of PRC Environmental Management, Inc. Numerous violations were identified.

April 9, 1992

Mr. Joe Kawecki, Superfund Program Management Branch, EPA Region V, inspected the GDC Landfill. He was accompanied by another unidentified inspector. Mr. Kawecki videotaped what he thought to be drums located at the north end of the GDC Landfill.

April 30, 1992

Mr. Schafer telephoned Mr. Kawecki to discuss the alleged burial of drums at the GDC Landfill. Earlier, Mr. Kawecki videotaped what he thought to be several drums, in the process of being buried, located at the north end of the GDC Landfill. Mr. Kawecki noted that his inspection of the GDC Landfill on April 9, 1992, identified five (5) empty drums that once held hydraulic oil for use in the backhoe.

July 31, 1992

Mr. Schafer inspected the GDC Landfill. Specifically, Mr. Schafer was evaluating the complaint by Mr. Hagen that Vulcan Materials, now known as AMG Resources, Inc. ("AMG"), was dumping waste that was contaminating their groundwater monitoring wells. Mr. Schafer walked the property line between the GDC Landfill and AMG and identified piles of a reddish steel scale and miscellaneous metal cans. The scrap metal was in contact with the standing water trapped between the two properties. Mr. Schafer noted that the water probably had some degree of contamination.

February 12, 1993

A Motion for Continuance was filed by IDEM in the Matter of Objections to the Denial of Closure Rules Variance for the GDC Landfill, Cause No. 92-S-J-744.

August 19, 1993

ORDER REQUESTING STATUS REPORT

On April 26th, 1991, a Recommended Order was issued in the above-captioned cause. As I have yet to receive a Final Order disposing of this matter, the following order is being issued. A copy of the final order disposing of this matter will substitute for the requested Status Report.

You are hereby ordered to file with the Presiding Officer, on or before December 1, 1993, a Status Report containing the following information:

1. Appearances of counsel (if not already filed).
2. A statement, subject to later amendment, sufficiently specific to apprise the Presiding Officer of the basic issues of fact and law of the cause of action.

3. Any presently contemplated or pending preliminary motions.
4. A statement as to all discovery which has been undertaken, including dates filed and dates of response.
5. A statement as to all discovery which is contemplated, and a tentative schedule therefore.
6. The status of settlement negotiations, including:
 - a. dates of previous settlement negotiations,
 - b. agreed facts or issues of law,
 - c. a statement as to all existing disputed issues of fact and law,
 - d. an assessment of the possibilities of settlement including a time frame for continued negotiations.
7. A proposed timetable for further proceedings in the case.

The parties are directed to confer with respect to all items listed above and to submit a joint statement thereto. If agreement cannot be reached on any time, separate statements may be submitted.

Dated this 19th day of August 1993.

March 23, 1994

FINAL ORDER OF THE WATER POLLUTION CONTROL BOARD

TO:

On March 9, 1994, the Water Pollution Control Board entered an Order modifying the Recommended Findings of Fact, Conclusions of Law and Order of the Administrative Law Judge, issued on April 26, 1991. The following Findings of Facts, Conclusions of Law, and Order, is hereby entered as the Final Order of the Water Pollution Control Board in the above captioned cause.

FINDINGS OF FACT

1. The Commissioner of the Indiana Department of Environmental Management (IDEM) is the Complainant in this cause and has jurisdiction over the Respondent

and the subject matter of this action. The IDEM also has the legal authority to issue emergency orders under IC 4-21.5-4.

2. The Respondent is Gary Development Company, Inc. (Gary) and owns a sanitary landfill located in Gary, Indiana.
3. On August 1, 1990, an inspector with the IDEM conducted an on-site investigation of Gary's Landfill property in response to allegations that water was being discharged from the landfill property to the Grand Calumet River.
4. IDEM's inspector observed a 2-5 acre pond on the far north side of Gary's property whose elevation was approximately 20 to 30 feet below that of the landfill.
5. A watchman employed by Gary advised the inspector that recent heavy rains had made it necessary to discharge excess water and to bring in truckloads of clay in order to prevent exposure of the landfill from the washing away of topsoil.
6. IDEM's inspector heard a pump running and observed water being pumped from the pond via a flexible hose which ran south into a 4" PVC pipe which was buried for most of its length. The PVC pipe emptied into a spillway which allowed the water to flow to a small ditch along railroad tracks and the ditch in turn entered the Grant Calumet River.
7. Gary's watchman refused to provide any further details about the discharge and ran to turn off the pump while IDEM's inspector followed the discharge line the other way.
8. As the pump was being shut off, the flow of water from the discharge end of the pipe was reduced to a trickle and the inspector observed a large volume of ponded water just below the end of the discharge pipe and a burned out area of vegetation further on towards the ditch.
9. The inspector did not take any samples of either the pond or the discharge water and none have since been taken.
10. Gary does not have a NPDES permit for discharging into the Grand Calumet River.
11. On October 18, 1990, the IDEM issued an Emergency Order of the Commissioner (Order) to Gary based, in whole, on August 1, 1990, inspection report.

12. The Order alleged that Gary was discharging leachate water from their facility to the Grand Calumet River without the benefit of a NPDES permit.
13. The Order also alleges that the discharge of untreated leachate threatens the aquatic environment of the Grand Calumet River and human health
14. As a result of IDEM's findings, Gary was ordered to immediately cease the discharge of leachate into state water and to apply for a NPDES permit within sixty (60) days of the Order.
15. Gary timely filed its appeal of the Order, thereby initiating this action.
16. On April 14, 1980, Gary entered into an Agreed Order in Cause No. B-406, which the Stream Pollution Control Board approved on May 20, 1980. The Agreed Order required Gary to cease discharge of water from its landfill to the Grand Calumet River or other waters of the state except in conformity with a NPDES permit.
17. The April 14, 1980, Agreed Order operated as a provisional operating permit and required Gary to apply for a renewal no later than ninety (90) days prior to the expiration date of the Agreed Order.
18. The Indiana Environmental Management Board (IEMB) received Gary's application for renewal on November 17, 1980. On February 16, 1992, IEMB granted Gary a Renewal of Operating Permit No. 45-2, with nine conditions attached. Condition No. 5 prohibited Gary from discharging water from the site to the Grand Calumet River or other waters of the state, except in conformity with an approved NPDES permit.
19. Gary filed a petition for hearing, contesting the imposition of the nine conditions, including Condition No. 5,
20. Thereafter, Gary and IEMB reached a settlement on Gary's appeal under Cause No. N-53, and their Settlement Agreement and Recommended Agreed Order was approved and adopted by the Indiana Environmental Management Board on February 18, 1983.
21. Paragraph No. 3 of this Agreed Order deleted in its entirety the contested Condition No. 5, thereby eliminating the requirement for a NPDES permit.
22. The Agreed Order in Cause No. N-53 provided that Gary's operating permit should last for a period of two years from its effective date of March 1, 1983.

23. Prior to the end of this period, Gary submitted an application for renewal of its operating permit, but no decision has been issued thereon.
24. The 2-5 acre pond from which water was being discharged on August 1, 1990, is located in a portion of the landfill which remains unfilled and below the approved site elevation.
25. This northern section remains unfilled because under the terms of the Agreed Order in Cause No. N-53, Gary, prior to filling it, was required to take four soil borings from the site's west wall. If these test results showed the permeability of the clay wall to be 5.0×10^{-6} centimeters per second or less, then construction of the remaining portion of the clay perimeter walls could proceed and filling commence.
26. The difference in the elevations of Gary's filled and unfilled sites contributes significantly to the ponding of water in the unfilled area.
27. On August 29, 1989, Gary filed with the IDEM a Notice of Suspending Operations and Petition for Variance under IC 13-7-7-6. The notice also advised the IDEM of its failure to respond to both the 1985 soil boring results and the 1985 permit renewal application. In addition, Gary informed IDEM of the continued existence of the unfilled area which remains below the approved site elevation.
28. On December 11, 1989, Gary filed a Request for Hearing on its Petition for Variance. As with the soil boring report and operating permit renewal application, IDEM has never filed on Gary's request for a hearing.

CONCLUSIONS OF LAW

1. The February 18, 1983, Agreed Order, in Cause No. N-53 is still in effect due to IDEM's failure to rule on Gary's operating permit renewal application.
2. 327 IAC 5-2-2 requires a NPDES permit for "...any discharge of pollutants into waters of the state as a point source discharge..."
3. There is not sufficient evidence to support IDEM's contention that the water discharged contained leachate.
4. However, the proximity of the pond to land-filled areas, plus the burned-out vegetation near the mouth of the pipe, supports the inference that the discharged water contains one or more pollutants.

5. Since the terms of the Agreed Order under Cause No. N-53 explicitly deleted the requirements for a NPDES permit, no chemical analysis of other observations sufficiently support IDEM's conclusion that the discharge water contained leachate, the Emergency Order dated October 18, 1990, was not an appropriate vehicle for resolution of the discharge problem.
6. Nonetheless, there is sufficient evidence to support IDEM's position that Gary must obtain an NPDES permit for its point source discharge

ORDER

1. Gary shall immediately cease discharge any water off-site until it obtains a valid NPDES permit.
2. IDEM shall rule on Gary's NPDES application within sixty (60) days of receiving it.

The Modified Findings of Facts, Conclusions of Law, and Order are hereby approved and entered as the Final Order of the Water Pollution Control Board. Pursuant to IC 4-21.5-5-5, a petition for judicial review is timely only if it is filed within thirty (30) days after the date that notice of the agency action, that is the subject of the petition for judicial review, was served.

Dated at Indianapolis, Indiana this 23rd day of March 1994.

October 19, 1994

A letter was issued to Mr. Michael G. Lopez, President, Actin, Inc., P.O. Box 518, 1102 East Columbia Drive, East Chicago, Indiana, 46312, from Mr. Wersan regarding an earlier request to dispose of rubber waste from a recent fire at the Rubber Materials Handling Company at the GDC Landfill. The letter noted that the GDC Landfill was closed and would need to re-open in order to accept such wastes.

May 19, 1995

A letter was issued to Mr. Lopez from Mr. Wersan regarding an earlier request to dispose of tire chips as an alternative daily cover at the GDC Landfill. The letter stated that shredded tires were considered a solid waste and that it must be managed as such if accepted for land disposal.